

*Teacher's  
Manual  
for*  
**OUR  
EARTH**

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CURRICULUM

*Whipple & James*  
**BASAL GEOGRAPHIES**



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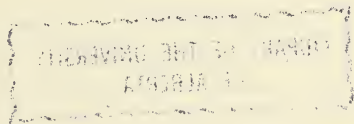
Teacher's Manual for  
**OUR EARTH**

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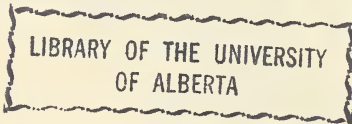
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# Introducing Pupils to Geography

This manual furnishes the teacher with practical hints for using *Our Earth* with young children. Lesson plans have been worked out with such care and in such detail that it is expected that even an inexperienced teacher who uses them will be able to provide her pupils with adequate learning experiences. The lesson plans include questions for the teacher to ask, specific comments for her to make, concrete suggestions for teaching vocabulary, and even the tests that should be given at stated intervals. In fact, so many teaching suggestions are offered that no teacher should be expected to use all of them; but the authors hope that every teacher will find much of value in this manual.

## Geography Readiness Necessary

Pupils need to be prepared for the study of geography. Geography readiness is threefold: (1) a background of experience sufficient for the child's age-level, (2) ability to grasp simple geographic concepts apart from reading, (3) ability to read the text provided.

Children must have sufficient maturity and training to grasp the primary principles as well as the more obvious facts of geography with which they daily come in contact. Their experiential backgrounds need to be built up before they can be expected to understand even the most elementary geographical relationships. Children must be taught habits of observation which will make them conscious of their environment, and which will help them interpret man's use of the natural features of the earth. They must learn to extend and supplement their direct experience by the intelligent study of pictures. Furthermore, they must become interested in reading and hearing about natural aspects of our earth, both those familiar to them and those less familiar. With this preparation, children may be led to reason geographically.

Any school introducing unprepared children to the study of geography without building such a sound foundation is courting failure in this field. To learn geography successfully, the pupil must have:

1. An adequate experiential background
2. An interest insuring that he will put forth his best efforts
3. Adequate habits of observing people, animals, the land about him
4. The beginnings of reasoning ability
5. An acquaintance with the most common geographical terms
6. An understanding of the more elementary geographical concepts
7. Reading ability not substantially below his position in school
8. Potential ability to locate himself with reference to his natural surroundings

Growth along all these lines is normally begun during the readiness period in the third and fourth grades. It is continued and developed more fully in later grades.

### "Our Earth" Provides Materials of Readiness

*Our Earth* is designed for the sole purpose of promoting geography readiness. It introduces the study of geography without assuming previous geographic understanding on the part of the pupil. No knowledge of geographic vocabulary is expected. The objective of the book is to initiate instruction in a field of study which needs step-by-step development to be intelligible.

*Our Earth* develops the primary geographic concepts which are within the grasp of young children, and it presents these concepts in language that such children can understand. It recognizes that the ability to pronounce the word *mountain*, or to give a simple, formal definition of a mountain, does not necessarily imply a clear or even an adequate understanding of the geographic concept involved. The aim of *Our Earth* is to provide the child with this understanding.

### The Major Geographic Ideas for the Readiness Period

The stories in *Our Earth* relate to a number of major geographic themes. These are the widely accepted themes for the period of readiness. Upon proper completion of a study of the book, a pupil should have a clear understanding of the following concepts:

1. The earth is a huge sphere.
2. The north pole is the point farthest north on the earth. The south pole is the point farthest south.
3. Directions are determined by the poles. To go north means to go toward the north pole. When a person is facing north, south is behind him, east is on his right, west is on his left.

4. Directions can be told by noting the position of the sun at noon or the North Star at night.
5. Halfway between the poles is a make-believe line called the equator. The equator divides the earth into northern and southern hemispheres.
6. The earth is made up of land and water.
7. Water covers much more of the earth than land does.
8. The land of our earth is composed of a variety of landscape features—mountains, hills, and plains.
9. Some parts of the land are covered with forests, other parts with grass, and still other parts with desert.
10. The landscape changes with the seasons.
11. The waters of the earth are composed of the ocean, lakes, and rivers.
12. A map is a plan, picture, or diagram showing part of the earth.
13. Man uses the land and water in many different ways.
14. Man gets his food, clothing, and shelter from our earth.
15. Men do different kinds of work to make their living.

### Time Allotment for the Units

As a basic text for young pupils *Our Earth* is ideally suited to a full-year program. The eight units are of unequal lengths, however, since some of them contain easier concepts than do others. To provide for these differences, a suggested thirty-six-week schedule is:

#### Suggested Time Allotment

Pages		No. Weeks
1-42	MOUNTAIN STORIES	5
43-72	IN HILLY LANDS	5
73-112	STORIES OF THE PLAINS	5
113-136	FUN ON THE LAKE	3
137-154	RIVER STORIES	3
155-196	SEA STORIES	5
197-218	THE EARTH WE LIVE ON	3
219-240	HOW WE GET FOOD, CLOTHING, AND SHELTER	3

Total for the book

32

This schedule allows an extra four weeks for such activities as introducing the book, acquainting the children with proper work habits, celebrating special days in which other material may be used, and reviewing and summarizing the main ideas of the book.

The above time allotments should be adapted to the special requirements of the children. If, for instance, the school is situated in a sheep-raising area, pupils will probably require less time to grasp and apply the ideas contained in the mountain stories on sheep. These time estimates are intended to aid rather than to restrict the teacher.

The recommended time allotment for each story is given later in the manual at the beginning of the lesson plans for the unit in which that story appears. (For example, see page 13 of this manual.)

### Order of Using the Units

The stories in *Our Earth*, as well as the daily plans in this manual, have been written with frequent references to understandings and vocabulary acquired in previous stories and units. The last two units depend on all the previous units for the background necessary to an understanding of the concepts they teach. If a teacher for any reason wishes to use the units in a different order from that in which they appear in the book, it is possible to do so with the first six units, which concern land and water forms. But it is highly important that the last two units be taught near the end of the year if the pupil is to gain the full value of their content.

Using individual stories in isolation from the rest of the units is not advisable, as this would destroy the effectiveness of the theme.

NOTE: The preface to *Our Earth*, entitled "For the Boys and Girls," presents an over-all view of the book in language the pupil can understand. It can be used at the discretion of the teacher as preliminary reading for capable pupils or as a final summary for slower classes.

### Five Types of Learning Experiences

At the readiness stage a variety of learning experiences should be provided for children from day to day. These fall roughly into five major types: (1) developmental activities, (2) excursions, (3) map reading, (4) application activities, and (5) tests.

### Developmental Activities

When important new geographic concepts are to be developed, the teacher should proceed simply and gradually to introduce these con-



cepts, assuming no previous knowledge of them on the part of the pupils. She should begin by drawing upon the pupil's personal experiences and observations as a basis for arousing their interest and natural curiosity. (For example, see the section entitled *Relating the Story to the Child's Experience*, page 15 in this manual.)

To encourage thoughtful reflection on the part of the pupil, and to extend the lesson, frequent reference is made in this manual to the pictures in *Our Earth*. Proper picture study can provide the pupil with a specific visual counterpart to his reading, and can make the whole learning process a more meaningful experience. (For example, see the section, *Learning Geography from Pictures*, page 15 in this manual.)

Following the introduction to the subject, pupils should be provided with a definite purpose for silent reading. Several ways this might be done are suggested in this manual. They include (1) reading to answer questions raised by the study of illustrations, (2) reading to verify preconceived ideas or opinions, (3) reading to solve a seemingly paradoxical problem, and (4) reading to learn what happens next in the story. (For example, see the section entitled *Purpose for Silent Reading*, page 16 in this manual.) The length of the silent-reading assignment should be determined both by the purpose provided and by the age level of the child. For this reason the lesson plans in the manual frequently divide a story at places where a natural break in the theme occurs.

Rereading often proves necessary to the child's complete understanding and usually contributes valuable additional information. This rereading can well be guided by providing the pupils with such tasks as these:

1. Listing steps in proper sequence
2. Preparing for group discussions
3. Completing outlines properly
4. Identifying central thoughts and main ideas
5. Preparing to discuss significant questions
6. Classifying items in a chart
7. Making lists of similar items

Such study will stimulate the child to organize principal facts and ideas and thereby gain fuller understanding of the concepts.

All the information obtained from the reading should then be used in class discussions in which the teacher endeavors to extend and enrich the main geographic concepts. Every pupil should be encouraged to take an active part in the discussion, and the teacher should guide

the slower pupils by asking them easy and obvious questions derived from the subject of the discussion. The manual provides suggestions for leading the pupils to ask relevant questions, make comparisons, see relationships, form opinions, draw inferences and conclusions, and interpret the text in their own words. (For example, see the section entitled *Enriching Concepts Through Discussion*, page 16 in this manual.) The teachers should clarify ideas learned from the text and should relate them to the illustrations and to the experience of the pupils. In this way innumerable associations will be formed in the child's mind which will connect the new concepts and fit them into a familiar pattern. Emphasis should always be placed on understanding rather than on memorization.

Several days' participation in these developmental activities will probably be required for the pupils to attain a clear understanding of the major geographic concepts contained in the text and for these concepts to be assimilated to the extent that the pupils will be able to apply them intelligently to later studies of geography.

## Excursions

**The importance of excursions.** Excursions are the life of geography. They not only add interest and realism to the work of the schoolroom, but they afford the pupils the opportunity to see concrete examples of geographic concepts. Through observation of their environment, children will be able to form direct impressions of fundamental geographic phenomena. These basic impressions supply the means by which the child can interpret further geographic facts and forces which he cannot directly experience. The teacher should therefore provide well-directed trips for her classes whenever possible and should encourage parents to take their children on similar trips.

**Planning the excursion.** The teacher should become acquainted with the land forms, water forms, or processes in the vicinity which could profitably be observed by her classes. The pupils should be started on a trip with definite points to note or facts to verify. They should be encouraged to make as specific, accurate, and comprehensive observations as their stage of maturity will permit. It should be remembered that the young child has had a limited experience and therefore has a limited number of concepts, some of which are vague, or even wrong. The child must be taught to look at things closely and to understand what he sees before he can interpret his observations.



**Kinds of excursions.** The nature of the excursion will, of course, be determined by the environment in which the children live. Interesting geographic material can usually be found close at hand, often within easy access of the school building. Types of excursions for each unit of *Our Earth* are suggested in this manual under the heading *Excursions for Children*. (See pages 36, 55, 69, 75, 90, 99, 117, and 131.) The teacher will usually find it possible to conduct at least one of these trips in her particular locality, and often several or even all of those listed. Short, simple trips can be made so appealing and helpful and so comparatively easy that even inexperienced teachers will soon feel that they can undertake longer trips.

## Map Reading

**Pictorial diagrams.** The pictorial diagrams used in this book are designed for the readiness period preceding systematic map study. Through the use of such diagrams, the teacher is gradually able to impress pupils with the idea of a map as a concrete guide to the physical earth and to prepare the way for the understanding and intelligent use of these guides. The diagram is introduced as a generalized picture of a particular part of the earth's surface. It should be studied in the light of the land and water forms it represents. The aim of instruction should be to lead the pupils to visualize the area as a real place, often populated by people who live, work, and play, even as the pupils themselves do.

In the study of the first pictorial diagram, showing the corn farm, the questions used in the lesson plans (see page 68 of this manual) are designed to help the child develop a sense of spatial orientation. The child sees in the diagram large areas of land and farm buildings reduced to a minute fraction of their actual size, yet retaining their natural forms and relationships. In the study of the diagram the pupil is taught to: (1) identify objects, (2) locate objects in relation to one another, and (3) see the relative sizes of both objects and land. In the next two diagrams showing the lakes and the river (see pages 83 and 97 of this manual), the pupil receives further practice in developing the above aptitudes. In addition he is taught to trace routes and to compare distances. All of these five skills are manifestly basic to good map reading.

**Globes.** In the unit "The Earth We Live On," the child is introduced to a simplified globe, showing only land, water, the poles, and

the equator. He is taught to read and interpret a map legend, to distinguish the hemispheres, and to locate the poles and the equator. During these lessons the teacher should constantly stress the idea that this globe is a picture of a full half of our vast earth, just as the pictorial diagrams were pictures of very, very small parts of the earth.

Directions are taught in connection with the concept of the poles. The teacher should locate the poles on the globe and establish the fact that going north means going toward the north pole and that going south means going toward the south pole. East and west are determined by their positions on the right or left of a person facing north. The terms *up* and *down* should be used only to mean *away from the earth* and *toward the center of the earth*. This distinction should be made clear on the globe.

It should be observed that the best method of telling directions is by noting the position of the sun at noon; for at noon the sun is invariably due south,\* whereas in the middle latitudes the sun rises due east only twice a year.

Once directions have been established on the globe and in theory, the child should be given practice in applying his knowledge. Rough sketches made by the pupils showing directions in the classroom and en route to and from school, as well as short excursions (for example, see page 131 in this manual), are an effective means of providing this practice. Activities requiring identification of directions in the classroom and in the neighborhood will increase the pupil's aptitude.

In teaching the continents, the teacher should lead the children to notice the distinguishing characteristics of each, such as comparative size, shape, peculiarities of coastline, and relative positions, especially with reference to North America, the poles, and the equator.

The study of the globes showing vegetation types (see page 129 in this manual) will have meaning for the child only after he has studied the previous units in the book. Much of *Our Earth* is devoted to a discussion of different kinds of vegetation. The study of the global vegetation maps begins with a review of this material, and the child is prepared to understand that vegetation as well as land and water forms can be represented on maps. A refined interpretation of the symbols in the key should not be attempted; it is sufficient if the child understands that vegetation maps can be drawn.

By such a gradual introduction to map symbols, the child not only

\* Of course, allowance must be made for Daylight Saving Time, if locally adopted.

receives the correct impression of what a map signifies, but he also gains through use an appreciation of the intrinsic value of a map.

### Application Activities

Children will grasp geographic concepts most easily by applying their principles in familiar activities. This manual provides throughout suggestions for activities which will enable the child to use the geographic ideas he has learned. (For example, see the section entitled *Independent Activities*, page 18 in this manual.) The child is invited to apply his new understanding through drawings, models, exhibits, dramatizations, written lists, and written compositions. Furthermore, in the introduction to new units and in the interpretation of the text, many of the questions suggested in this manual call for application of facts or principles learned earlier in the book, thereby applying previous learning to present study. In addition, many of the excursions described are intended to help the child make outside the classroom practical application of his new grasp of geography. This can be done largely by observing geographical features and processes described in *Our Earth*. Thus, by application, the new concepts become familiar, meaningful, and of practical value.

### Test Activities

Tests have been provided in this manual for each unit of study. The use of these tests will permit the teacher to (1) estimate the degree of progress which each child is making, (2) determine any important geographic features requiring reteaching, and (3) insure the child's mastery at each stage before advancing to the next. The tests will also give the pupils a feeling of accomplishment at the end of a unit. Since young children are not far advanced in spelling, the tests have been constructed in such a way as to avoid spelling handicaps. (For example, see the section entitled *Suggested Tests*, page 24 in this manual.)

Teachers using *Our Earth* are privileged to make hectographed copies of any of these tests if they so desire.

After a test has been given, it is advisable to discuss with the children the results in terms of effort, interest, and achievement, and to attempt to discover the reasons for any shortcomings.

### The Teaching of Vocabulary

In geography the teacher has two responsibilities for vocabulary development: (1) to help the pupil apply word knowledge gained from

the reading period, and (2) to teach the specialized vocabulary of geography, such as *mountain, hill, sea, north pole*. If pupils are greatly retarded in reading, it is best to keep a list of the difficult words and provide a later time for word drills, rather than interrupt the trend of discussion by permitting a pupil to struggle with a word.

At the beginning of each lesson plan in this manual is a list of the words to be taught on the pages of the text indicated. Both the meanings and the pronunciation of the words are deserving of careful attention, in accordance with the following suggestions:

1. New words should be presented with many rich associations. This can be done in three ways: (a) Introduce the word naturally into a discussion, write it on the board, talk about it, show material—maps, pictures, charts—which will help to clarify the word, and lead the pupils to use it in further discussion. (b) If the word indicates a pictured object, call attention to the object as it appears in an illustration in *Our Earth*, lead the pupils to call it by name, ask questions about it, and write the word on the board. (c) Have the pupils read silently and study the paragraph in which the word appears, and then make their own suggestions regarding pronunciation, meaning, and use.
2. In the case of unphonetic words such as *ewe* (see page 15 in this manual), the teacher should teach the pupils how to pronounce the word, unless the context gives clues to the pronunciation.
3. It is a good plan to have pupils record in a vocabulary notebook each new geographic word that they can correctly spell, pronounce, and define.
4. Upon completion of a unit, the teacher or a committee of pupils may prepare phrase or word cards for each new expression taught during the unit. Contests, of chosen teams or of boys versus girls, may follow, in which the pupil should be expected to pronounce correctly the word shown and to tell how it was used in the unit.

### Geographic Skills Acquired Through Study of "Our Earth"

If the suggestions in this manual are used in teaching *Our Earth* the pupil will develop certain fundamental skills which will aid him in his later experience in geography. The following list enumerates those abilities, attitudes, appreciations, and understandings which the child may be expected to acquire, in whole or in part, through the study of the stories in this book:

1. An inquiring attitude toward natural features of the landscape.
2. Ability to interpret pictures and relate them to the text.
3. Ability to relate the text to personal experience.
4. Ability to recognize various land forms and water forms.
5. Ability to locate the cardinal points of the compass and to make practical use of directions in daily life.
6. Ability to visualize the large areas of water and land in their proper position on the globe.
7. Ability to recognize some of the ways in which man uses the land and water.
8. Ability to understand and interpret pictorial diagrams and to relate them to the accompanying text.
9. Ability to interpret a simple map legend.
10. An appreciation of the natural beauty of the earth.
11. An appreciation of the work of others in providing the necessities of life.
12. A partial understanding of man's dependence upon the earth for food, clothing, and shelter.
13. An appreciation of the emotional and human features of the lives of various workers, such as the loneliness of a herder in the mountains, the discomforts of a fire fighter, and the thrills and dangers experienced by a fisherman.

### Hints for Teaching Geography

In initiating an approach to the stories in *Our Earth*, the teacher who observes the following suggestions is certain to be successful:

1. When pupils are given the book they should have definite reasons for using it, either in a class group or independently. Worth-while activities for pupils to engage in by themselves have been provided in this manual under the title *Independent Activities*. Merely employing the book for pleasure reading will not secure for the pupils the valuable results that can be obtained through guided use.
2. The material in the book is to be studied. Each story may be read and reread for different purposes. The pupil should not be permitted to rush through the stories.
3. The teacher should assume that the child knows nothing about geography. Everything necessary to geographic understanding ought to be taught.



4. Through observation of the area near the school, the children should be encouraged to apply, contrast, and compare geographic concepts they have learned. If possible, they should be taken on trips to observe things about which they are studying.
5. The teacher, as well as the pupils, should make use of personal experiences which serve to exemplify points under discussion.
6. Every possible avenue of thought should be used to extend the child's experiential background both before and after the reading. The illustrations in *Our Earth* supply a wealth of material for this purpose.
7. The child should understand rather than memorize the geographic concepts.
8. Interest in the stories is best maintained by use of the illustrations, arousal of curiosity, use of thought-provoking questions, and a variety of teaching procedures such as those worked out in detail in this manual.
9. The teacher should provide for individual differences in every type of lesson. Easy, obvious questions and tasks may be given slow pupils. Much encouragement and appreciation of the germ of truth in a pupil's comments result in greater effort on his part.
10. To make geographic ideas permanent, the teacher should use a variety of associations, enrich and widen the meanings, and apply the information gained.
11. Pupils should be given tests to determine what they have learned. This manual supplies test activities for every unit.

## Mountain Stories, pages 1-42

### Suggested Time Allotment

Page		No. Weeks
3	THE SHEEP HERDER AND HIS DOGS	1
11	GRAZING IN THE MOUNTAINS }	2
14	RETURNING TO THE VALLEY }	
23	IN THE LOOKOUT TOWER }	1
28	FIGHTING A FOREST FIRE }	
36	WINTER FUN IN THE MOUNTAINS }	1
40	WHAT IS A MOUNTAIN? }	
<i>Total for the unit</i>		<hr/> 5

### Geographic Concepts to Be Developed

**The major concepts.** The six stories in this unit are geographic stories especially designed to teach specific geographic concepts. The two principal concepts upon which all the stories are based are:

1. A mountain is a part of the land which is high enough to stand out conspicuously from its surroundings and which has only a small summit area.
2. Men use mountainous lands in many ways, both for making a living and for recreational purposes.

**Stories on sheep herding.** The three stories on sheep herding are designed to teach these geographic facts:

1. The use of mountains as summer pasture for sheep is important to the people on the plains.
2. Sheep can find something to eat at high altitudes where the covering of grass is thin.
3. Sheep adapt well to cold climates.
4. Mountain population is scanty because there is little flat land.
5. Most of our mountain pastures are public property, and the vegetation there must be conserved.

6. Sheep are raised for their wool and for their meat.
7. The higher up in the mountains we go, the cooler the weather becomes; valleys are warmer than neighboring mountaintops.
8. Seasonal changes influence the herder's work.

**Forest fire stories.** The two stories concerning forest fires stress the following geographic ideas:

1. Certain physical conditions are present when fires burn and spread, viz., presence of air, dryness, and wind.
2. The destructive effects of forest fires are far-reaching. Valuable supplies of timber are lost; erosion of the soil, bare slopes, and floods result; burning of vegetation destroys grazing land.
3. Most fires can be prevented, and our mountain slopes should be kept forested.

**Stories of winter fun.** The story entitled "Winter Fun in the Mountains" emphasizes man's recreational use of mountains. The main geographic facts included are:

1. An invigorating climate and beautiful scenery make the mountains useful to man as a playground.
2. There are both steep and gentle slopes on mountainsides.
3. Winter days in our country are shorter than summer days.

**Basic concept.** The story at the end of the unit called "What Is a Mountain?" contains the basic geographical concept toward which all of the preceding stories in the unit have been leading: i.e., a clear and meaningful definition of a mountain. The story teaches also that mountains are cooler than lowlands, have various shapes, are found in ranges, and that there are also mountain peaks.

In teaching this story the facts learned in all of the preceding stories should be utilized. Reference also to the pictures studied during the unit will aid materially in clarifying the concept of a mountain.

### THE SHEEP HERDER AND HIS DOGS, pages 1-9

#### Readiness vocabulary

mountain	grazing	mules
herder	ewes	slope
stump	pasture	valley
flock	camp tender	split lip



### Relating the story to the child's experience

Ask the children how many of them own a dog or would like to own one, whether they think dogs understand what people say to them, what kind of tricks dogs can do, and how they learned to do these tricks. Stress the idea that training is necessary. Tell the pupils that some dogs are trained to do very valuable work and that the first three stories in *Our Earth* will tell them about some useful work done by two dogs named Shep and Spot (write names on the board) and also how their master, John Ward, works for his living just as their fathers, or other men they've seen at work, do. Stress that in the work which Mr. Ward does dogs are needed to help him.

### Learning geography from pictures, pages 1, 2, and 4

Picture, page 1. *This is the kind of place where John Ward works with his dogs. The animals you see in the picture are being cared for by John.* In the study of the pictures, place new words on the board as they occur in the discussion. Lead the pupils to pronounce each word correctly or pronounce it for them.

The following questions and comments will serve as a guide:

1. What kind of animals do you see in the picture? Have you ever seen animals like these before? Where?
2. Do you know what very young sheep are called? Do you see any in the picture? What are these sheep doing?
3. The lambs are with their mothers. All the large sheep in this picture are mother sheep. They have a name, too. They are called *ewes*. (Write the word on the board and teach it.)
4. In what kind of place are the sheep? Do you know of any place that looks like this? Do you think this kind of land would be easy to travel over? Why not?
5. Do you see the fences in the picture? Why do you suppose they were built here?

Picture, page 2. *Now look at the next picture. Who do you think this man is?*

1. What is he sitting on? How can you tell that it once was a large tree? There are many such stumps in the forests. Why?
2. Is the weather here cool or warm? How can you tell by looking at John Ward?
3. Is John Ward working or resting in this picture? What kind of work is he doing? (Introduce the word *herding*.)

4. Can you see two dogs in this picture? Where? They are Shep and Spot and they help John Ward. What kind of work do you think they can do?

**Picture, page 4.** *Here is a picture of a group of sheep. Do you know what such a large number of sheep is called?* Write *flock* on the board. Continue with these questions:

1. What are the sheep doing? Notice that this is a nice grassy spot.
2. Look at the trees. Are there many of them? What do we call such a large group of trees? Have you ever seen trees like these?

### **Purpose for silent reading, pages 3-5**

Ask the children to read the first part of the story to see whether they can find out the following: (Have the list of statements written on the board in advance of the geography period.)

1. The name of John Ward's kind of work
2. Whether or not people live in these mountains
3. How many sheep belong to the large flocks
4. What a mother sheep is called
5. What word we use when we want to say that sheep are eating grass
6. What word we use for a place where animals find grass to eat
7. What kind of work the dogs do
8. Why the herder has brought his sheep to the mountains

### **Enriching concepts through discussion**

After the silent reading ask the children to give the information called for in the above statements. When the answer contains only one word, write it on the board. For questions like 2, 7, and 8, have the pertinent parts read orally.

### **Learning geography from pictures, pages 5, 6**

**Picture, page 5.** *This is a picture of the herder's hut.*

1. Do you think the hut is strongly built? Why not?
2. Why do you suppose John and Shep left the flock and walked over to the hut? Where do you think Spot might be?

**Picture, page 6.** *The man in this picture is not John Ward. Who do you suppose the man is and where might he be going?* Encourage the pupils to study the picture before answering.

1. What kind of animals are following him? (Write *mules* on the board.) What do you think they are carrying?
2. Why do you think mules are used for this job?
3. What kind of place are they in?
4. Are they going to higher or lower land? How can you tell?
5. Why is the man wearing a sweater?

### Purpose for silent reading, pages 5-8

Tell the children to read silently to find out how the man with the mules helps John Ward. Also ask them to be able to answer the questions raised about the picture.

### Enriching concepts through discussion

1. What is Jim Brown's kind of work called?
2. Why must the herder depend on the camp tender for his food? (Explain that the camp tender makes his living all summer by taking food to herders in the mountains.)
3. Why do the mules travel so slowly?
4. (Draw two lines on the board, one representing a steep slope and the other a gentle slope.) Which slope do you think would be easier to climb? Find and read orally the sentences describing each slope.
5. How can the camp tender tell he is coming close to the flock?
6. Why is the herder so glad to see the camp tender?
7. Why did the camp tender bring bacon rather than some other kind of meat? What else did the camp tender bring?

### Learning geography from pictures

Picture, page 9. *Here is John Ward holding one of his sheep.*

1. Can you tell how big the sheep is from this picture?
2. Look at the sheep's mouth. Do you see the big crease in its upper lip? Put your finger there.
3. What do you think this crease is? Read the rest of this story, beginning with the last paragraph on page 8 to find out what this upper lip is called and how a sheep uses it.

### Enriching concepts through discussion

1. Why can a sheep eat so close to the ground?
2. Why must the herder move the sheep to new pastures often?

3. Read the sentence which tells what kind of work John and the dogs will do in the mountains all summer. We call summer a season. Who can name the other seasons of the year? Which is usually warmest? Which is usually coldest?

### Extending geographic ideas learned

The group may help suggest some titles or sentences to be used to label drawings which will illustrate the main facts learned in the story. Some suggested titles are:

1. This is a flock of ewes and their lambs.
2. Very high hills are called mountains.
3. The herder is tending his flock.
4. Spot is gently circling a lamb.
5. Forest pastures in mountains make good grazing land for sheep.
6. A sheep has a split lip.
7. This is a gentle mountain slope.
8. This is a steep mountain slope.

### Independent activities

1. Copy a list of the new geographic terms learned.
2. Copy a sentence that explains each of the pictures you have studied on pages 1, 2, 4, 5, 6, and 9.
3. Write a title for each picture.
4. Draw, cut out, and color the characters in the story (the herder, Spot, Shep, and the camp tender).
5. Look for pictures of mountains in old magazines and prepare a mountain scrapbook.
6. Separate a piece of woolen yarn into its fibers or hairs.

NOTE: These activities have been designed to meet the needs of the teacher who has two or more grade groups in her classroom and must provide worth-while activities for periods when she cannot work directly with the third-graders. The activities are also very valuable for individual pupils or for small groups, or the teacher may wish an entire class to participate.

### GRAZING IN THE MOUNTAINS, pages 10-13

#### Readiness vocabulary

mountaintop   mountain stream   forest pasture   forest ranger

### Relating the story to the child's experience

*Do you think it would be a hard job to get a flock of two thousand sheep to move in the direction you want them to go? What would be the hardest part? How do you think Shep and Spot could help?* If anyone has seen a large flock of sheep being moved, have him describe the sight. Say that the next story tells how John Ward moved his flock to a new pasture.

Then ask the children how they would like to camp out in the mountains and what they think they would need in order to camp successfully. Direct them to the picture on page 10.

### Learning geography from pictures

*Picture, page 10. This picture tells us a lot about how John Ward lives in his hut in the mountains. Look again at the picture on page 5, and you will see the same hut in front of which John is standing.* Have the children compare the two pictures, noting that page 10 is a close-up of the picture on page 5. Guide the discussion to include the following facts and questions about John's life in the mountains:

1. John must cook all of his meals on this little iron stove. The stove probably burns wood. In the picture he is cooking breakfast, probably eggs.
2. Behind John on the shelf or table are some of his supplies. Draw attention to the can of coffee at the back and the coffee pot on the stove.
3. How do you know from this picture that John washes his own clothes?
4. Which one of the dogs is in the picture on page 10? Which one is in the picture on page 5? Where do you suppose the other dog is in each case?

### Purpose for silent reading, pages 11-12

*While John is asleep one night something happens which causes one dog to bark and bark. Read the story to see whether you can discover what happened.*

### Enriching concepts through discussion

Have one of the children tell what happened during the night. Then ask questions to determine the following:

1. Whether or not it is cold in the mountains at night

2. How the high mountaintop is different from the valley
3. How the herder's camp is moved
4. How the herder and his dogs move the sheep
5. How sheep sleep at night

### Purpose for silent reading, page 13

Direct attention again to the picture on page 4. Tell the children that the last part of the story will tell them:

1. The correct name for this kind of place
2. Who owns all this land and these trees
3. About a *forest ranger* (write on the board) who came to see John Ward and who tells him two important things he is glad to know

### Enriching concepts through discussion

Have the pupils tell what they found out concerning the assignment. Add these questions to the discussion:

1. Why do forest rangers look after these forest pastures?
2. For whom do forest rangers work?
3. How does our government help the herder in his work?

### Independent activities

This story lends itself well to a simple dramatization. The scenes might include:

1. John Ward cooking his breakfast and talking to his dogs.
2. The herder whistling to his dogs and moving the sheep.
3. Going to sleep in the mountains and the noise in the night.
4. The visit of the forest ranger.

### RETURNING TO THE VALLEY, pages 14-21

#### Readiness vocabulary

lower slope	mutton	shear
pond	feed	fleece
sheep ranch	winter pasture	dipping sheep

#### Relating the story to the child's experience

*We have followed the story of John Ward and his dogs from the time they started their flock up the mountains in the early spring. At that time the lambs were very small and stayed close to their mothers.*



*Then we saw how the herder kept moving them from pasture to pasture until, by the middle of summer, they were far up in the high slopes of the mountains. Now the lambs are growing large and round and fat. See them in the picture on page 19.*

*One morning, however, the herder decides that he had better start moving his flock back toward the valley from which they came. He wants to get them out of the mountains before September. Do you know why? What is the weather like in the month of September where we live? Why do you think he must leave the mountains so early? Our next story will tell us why.*

### **Learning geography from pictures, pages 15, 16**

*Picture, page 15. Here is John Ward gathering his sheep to take them down to the valley.*

1. Who do you suppose the other man in the picture is? From our last story, do you remember some of the things this man does?
2. What will the dogs do to help the herder?
3. Have you ever seen a tree like the small green one? Do you know its real name?
4. The picture shows only the trunks of some of the trees. Where are their branches? These trees are pine trees. Because their trunks are so tall and straight these trees will make fine lumber. Do you know of a place where there are trees like these?

*Picture, page 16. This picture shows the sheep at a place where they can get a drink.*

1. Why are the sheep glad to get here?
2. What name could we give to this body of water?
3. Have they reached the valley here? How can you tell?
4. Do you see John Ward? On what kind of animal is he riding? Where did he get it? Why didn't he use it in the mountains?

### **Purpose for silent reading, pages 14-16**

Tell the pupils that the first three pages of the story should help them answer the questions given below. Have the questions written on the board and go over them with the class before the pupils begin to read.

1. Why must the sheep be taken down from the mountains before September?

2. How do the dogs help the herder?
3. How long can a sheep go without water?
4. Why did the herder take off his coat when he reached the valley?
5. How is the land in the valley different from mountain land?
6. Where do the sheep drink?

### Enriching concepts through discussion

Let the children give the answers they found to the questions. In discussing the answers use the following suggestions. The numbers correspond to the questions above.

1. Read orally the four sentences which answer the first question. Bring out the reason it gets cold so early.
2. Explain the term *guiding sheep*.
3. Tell of another way a sheep can get water without drinking it.
4. Read orally the two sentences which answer the fourth question. Bring out the fact that valleys are warmer.
5. Elicit the two words which are the opposites of *rough* and *steep*.
6. Bring out the fact that a pond is a small body of water.

### Learning geography from pictures, pages 17, 19

**Picture, page 17.** *This picture shows John Ward with his sheep.*

1. What kind of place is this?
2. Why are there no houses here?
3. Why are there no trees? What plants do you see? Does the land look wet or dry? Do you think it rains much? (Teach the fact that mountain slopes get more rain than surrounding valleys, and hence trees grow better in mountains.)
4. Where is the herder taking the sheep?
5. Compare this place with the picture on page 1. How is it different?

**Picture, page 19.** *Here is a good picture of John Ward's sheep. Look at the picture on page 9 also.* Using both pictures ask the children these questions:

1. Do sheep mind the cold weather? Why? How are sheep able to stand warm weather?
2. How do you think we get wool from sheep? Do you think we could get wool from these sheep? Why?
3. Do these sheep look different from those on page 1? How?



4. Are you wearing any clothes made of sheep's wool?
5. What does the picture on page 19 tell you about how the sheep act in a flock?

### Purpose for silent reading, pages 17-21

Place on the board the questions given below and be certain the pupils understand them. Then ask the children to read the story silently to find the answers to the questions.

1. What kind of land is shown in the picture on page 17?
2. On what kind of farm do these sheep stay in winter?
3. Who owns the sheep? What will he do with some of his lambs?
4. What kind of meat comes from sheep?
5. In what two ways will the sheep get food in winter?
6. How will they get water?
7. What keeps the sheep warm in winter?
8. What does *shearing a sheep* mean?
9. What is a fleece? For what is it used?
10. What do we mean by *dipping a sheep*? Why is it done? When is it done?
11. Are all sheep taken to the mountains in summer?
12. What two things do we get from sheep?

### Enriching concepts through discussion

Discuss the answers to the questions given in the silent reading assignment. Write new geographic words on the board as they are discussed and use additional pictures to exemplify the various processes and places mentioned.

### Learning geography from pictures

Picture, page 21. *Look at this picture and tell what you see.* Encourage the pupils to explain why snow is on the mountain but not on the trees in the valley. Stress that the higher we go, the cooler the weather becomes.

### Independent activities

Using pictures cut from old magazines, the pupils may make a scrapbook or a bulletin board display showing the following scenes:

1. Summertime in the mountains
2. Wintertime in the mountains

3. Various types of valleys
4. Sheep in winter pastures
5. Typical ranch scenes
6. Shearing and dipping sheep

Pupils can also do the following:

1. Collect samples of raw wool and squares of various types of woolen cloth, and prepare a display.
2. Make a list of useful things that are made of wool. If this activity is to be carried out independently, pupils may select and copy the right words from a blackboard list in order to avoid misspellings.

### SUGGESTED TESTS for pages 1-21

#### Test on geographic vocabulary

List the following words on the board to facilitate correct spelling and then read the sentences suggested below, leaving out the key words which are the answers. Pupils are to select the proper word from the board and write it on their papers.

split lip	ewes	sheep ranches	pasture
herders	mountain	grazing	mutton
dipping	steep	camp tender	flock
fleece	shearing	mule	forest ranger
lamb	valley	Mr. Dodd	food
clothing	shelter	our government	

1. The men who take care of sheep in the mountain are called (*herders*).
2. There are often as many sheep in one (*flock*) as there are people in a town.
3. Mother sheep are called (*ewes*).
4. When sheep are eating grass we say they are (*grazing*).
5. A grassy spot where sheep eat is called a (*pasture*).
6. Sheep can cut grass close to the roots because they have a (*split lip*).
7. The (*mule*) is an animal used to carry loads on steep mountain paths.
8. Farms where sheep are raised are called (*sheep ranches*).
9. Forest rangers take care of the pasture lands in the mountains because these lands belong to (*our government*).

10. Cutting the wool from a sheep is called (*shearing*).
11. All the wool cut from a sheep is called a (*fleece*).
12. Insects on the sheep are killed by (*dipping*) the sheep.
13. Meat which comes from a full-grown sheep is called (*mutton*).
14. Sheep are useful to man for both (*food*) and (*clothing*).
15. A hill is not so high as a (*mountain*).
16. A low place between mountains is called a (*valley*).

### Test on geographic ideas

Tell the children to choose the word which best fits each of the sentences below as you read aloud the sentences and words.

1. (Many, *Few*) people live in the mountains.
2. Food for people is (*scarce*, plentiful) in the mountains.
3. Valleys are (*warmer*, colder) than mountains.
4. Mountains are used as (winter, *summer*) pasture for sheep.
5. It is easier to climb a (*gentle*, steep) slope of a mountain.
6. Sheep are taken into the mountains in (fall, *spring*).
7. New lambs are born in (*spring*, fall).
8. There is (*little*, much) flat land in the mountains.

### IN THE LOOKOUT TOWER, pages 22-27

#### Readiness vocabulary

lookout tower	telephone	radio	snapping twigs
map	fire chief	flames	fire fighters

#### Relating the story to the child's experience

One of the most important concepts introduced in this story is how a map can be used to locate forest fires. In order to prepare children for the significance and purpose of maps, discuss with them occasions when they may have seen their parents use a map. Put the word on the board and teach it. Perhaps the children can recall a trip on which they used a road map, or perhaps they have seen maps of their community. Stress the concept of the *use* a map can have, rather than *how to use* a map; the latter will be developed in later readings. Have the children think of times when a map might be of help to them.

Show a picture of a lookout tower and ask someone to tell what it is. Lead the children to tell why it was built, what it would be like to climb to the top, and what they would be able to see. Have any chil-

dren who have had the experience tell what it is like to be up in a tall building. Say that the next story is called "In the Lookout Tower" and that it tells about a man who lives in a lookout tower much of the time. Have them imagine what this would be like.

### Learning geography from pictures

Picture, page 22. *You will remember we read about a forest ranger in another story. The man in this picture is another forest ranger, Sam Tyler. He does a different kind of work from that done by the other ranger.* Use these questions in helping the pupils study the picture:

1. Where is this forest ranger? How can you tell?
2. Do you think there are windows on all four sides of the tower? Why?
3. What is Sam Tyler doing? What is he pointing at? (Be sure the children notice the map on the desk.)
4. Do you see some lines on the map? What do you think they mean?

### Purpose for silent reading, pages 23-24

*One day something happened which made Sam Tyler pick up his telephone in a hurry. Let's read the first two pages of this story to find out what it was and also to answer the questions we couldn't answer when we talked about the picture.*

### Enriching concepts through discussion

1. Where are lookout towers built? Why?
2. What is Sam Tyler's main job? Is this an important job? Do you suppose there are other ways of watching for fires?
3. How does the ranger make use of his map?
4. How does he know that the fire will spread? What kind of weather makes fires burn easily? Why?
5. To whom does Sam Tyler telephone?
6. What three things will be harmed by the fire?

### Learning geography from pictures, pages 25, 27

Picture, page 25. *Here is the fire Sam Tyler saw from his tower.*

1. What do you think might have started this fire?
2. Has it been burning very long?

3. Why will it spread so easily here? (*Dead limbs, thick underbrush, open wind-swept slope.*)

Picture, page 27. *The men in this picture look ready for work.*

1. Who do you suppose they are? Where are they going?
2. Can you tell what is in the second truck? The story will tell us.
3. Do you think this road is easy or hard to drive on? Why?

### Purpose for silent reading, pages 24-27

*Before Chief Stone sends out a large group of fire fighters, he sends a man named Jim. When Jim gets to the fire, he uses a small radio that is different from the kind we usually see. Let's read the rest of the story to find out why it is so important for Jim to use his radio.*

### Enriching concepts through discussion

Use these questions during the discussion:

1. Why did Jim walk to the fire?
2. Read the part that tells what he saw when he got there.
3. How is his radio different from most radios?
4. Why is it very useful when there is a fire?
5. What tools do the men take with them?
6. How do they know how to get to the fire?
7. Does Mr. Tyler help the men fight the fire?
8. Read the sentence which tells how long Sam must stay in the tower. Would you like to be that kind of ranger?

### Independent activities

1. Make a sand table or other exhibit which will include mountains, a model of a lookout tower, trees, and fire fighters on their way to a forest fire.
2. Draw pictures of forest fires.
3. Dramatize the forest ranger in the lookout tower at work.

### FIGHTING A FOREST FIRE, pages 28-35

#### Readiness vocabulary

crashes

ashes

campfire

bark

sparks

soil

tree trunk

smokers

fastened

spreading

**Relating the story to the child's experience**

Ask the children whether they have ever heard of a smoke jumper. Tell them how these men parachute to forest fires when they cannot use the roads and how their tools are also parachuted. Ask the children whether they know why the roads cannot always be used. Tell them that the next story will show how hard it is to put out fires in the forest and will tell how fires get started. Let the children participate in telling how they think fires start and are put out, and how serious the damage can be.

**Learning geography from pictures, pages 29, 31, 32**

**Picture, page 29.** *Here are some of the fire fighters. Notice the kind of forest in which the fire started.*

1. Can you see what they have done so far to stop the fire?
2. Why have they cut down dead trees?
3. Why are some dead trees left standing?
4. Do you notice that the men are behind one another in a line? Do you know why?
5. On which side of the line of men do you think the fire is? Why do you think so? The story will tell us how we know this.
6. Are the fire fighters young or old men? Why are young men used for this work?

**Picture, page 31.** *Let's look at the picture on this page. Do you see the fire running along the ground? What do you think makes it do that?*

1. What is this man doing? Why is he doing it?
2. Why is there so much smoke?
3. Do you see the lovely young pine tree in the center of the picture? How can you always tell an evergreen tree? Will the fire fighters be able to save that tree?
4. How do you think this fire fighter feels?

**Picture, page 32.** *See the man leading the line of mules up the mountain. They are bringing water for the men to drink.*

1. Where do you suppose the drinking water is?
2. Why are mules used for this job?
3. What kind of mountain slope do you see? Why is it so bare? Where do you think the stones at the bottom of the slope came from? Why did they roll down the slope?



**Purpose for silent reading, pages 28-32**

*Read the first part of the story looking for these eight points.* Write the points on the board and go over them orally with the children before they begin to read.

1. Why some fires spread faster than others
2. Why the men walk part of the way to the fire
3. How a forest fire spreads
4. How some of the wild animals escape the fire
5. Three different things the men do to put out the fire
6. Why some of the men throw dirt on the flames
7. Why fire fighting is dangerous work
8. How the men get water to drink

NOTE: In the case of slow groups it is well to have the pupils read the selection twice, first for the story and then with the eight points in mind.

**Enriching concepts through discussion**

In discussing the above points, the following suggestions will be helpful. The numbers correspond to those of the above questions.

1. Read orally the two sentences which contain the answer to the first question.
2. Stress the fact that many places in the mountains cannot be reached by truck or car. Refer again to the smoke jumpers.
3. Read orally the sentence which tells how fires spread and discuss the physical conditions which are present when fires burn and spread.
4. Bring out what happens to wild animals during the fire and why they often die even though they have escaped being burned.
5. Train the children to skim through the pages to find the three different answers.
6. Refer back to the discussion of question 3.
7. Teach the word *sparks*, using personal experiences of the children to make the meaning clear.
8. Read the part of the story which tells how the men get water.

**Purpose for silent reading, pages 33-35**

*Let's read the last part of the story to find out what started this fire.* Write the following statements and questions on the board to be used as a guide in reading:

1. Be able to explain why trees will not grow quickly on a bare mountain slope.
2. Be able to find quickly five sentences which tell how the burned part of the forest looked after the fire.
3. How long does it take for trees to grow again after a fire?
4. Why must some of the men stay in the forest after the fire is out?
5. Why can't fires always be put out before they do so much damage?
6. The story tells us two ways in which forest fires are started. Can you find them? Can you think of any other ways fires might start?
7. How do good campers build fires and put them out?

### Learning geography from pictures

Picture, page 35. *The men work hard to put out the fire and you can imagine how glad they are to see the last flames go out. Look at the picture on page 35 to see how the forest looks after the fire.*

1. What word do you think would best describe this picture?
2. Was it a big fire? How much damage was done?
3. Will John Ward be able to use this land as pasture for his sheep? Why not?
4. It will take a long time for trees to grow here again and when they do they will probably not be as fine as the trees which grew here before the fire. Do you think this is a good reason to be careful with fire when you are out camping?

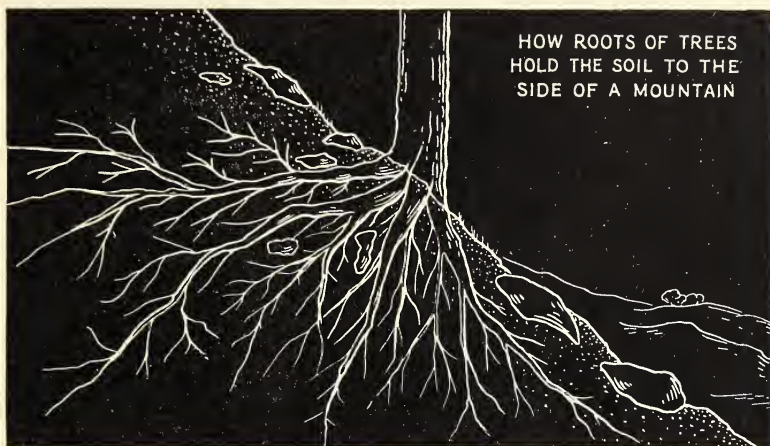
### Enriching concepts through discussion

In discussing the bare mountain slope, draw a sketch showing how the roots of trees hold the soil to the side of the mountain. Also show a bare slope with rocks and soil collected at the base of it. Stress the importance of maintaining a forest cover on mountain slopes and the fact that bare slopes are of little use to man. Point out the danger of floods in the valleys.

Have the part of the story which describes the burned forest read orally. This is a good place to stress the evils of forest fires: viz., the loss of lives of people and animals, and the burning of entire villages; the fact that after high-grade timber is burned off an area, only inferior kinds of timber will be able to grow there; and finally, the fact that the fertility of the soil is destroyed by the burning of the humus.

In answering questions 4, 5, and 6 above, include other causes





of forest fires, such as lightning, sparks from locomotives, careless brush-burning, etc. Stress the fact that, except for those due to lightning, *nearly all forest fires may be prevented.*

### Independent activities

1. This story lends itself to two dramatizations. Divide the class and have one part dramatize "Fire fighters at work," and the other do "Careless campers versus good campers."
2. Have members of the class choose and draw various pictures which could be used for an effective bulletin board. Titles for the pictures might include:

The causes of forest fires

Why forest fires spread

The evils of forest fires

How forest fires may be prevented

### WINTER FUN IN THE MOUNTAINS, pages 36-39

#### Readiness vocabulary

holiday

skis

pole

sideways

twist

downhill

mountainside

#### Relating the story to the child's experience

Ask the children to tell about the fun they've had in the playgrounds or parks they have visited. Let them describe the various

activities they have seen there in both the winter and summer seasons. Lead them to realize that mountains make splendid playgrounds. Tell them the next story will show them how much fun can be had in the mountains in the wintertime.

### Learning geography from pictures, pages 37, 39

**Picture, page 37.** *Do you remember Mr. Dodd, who owned the sheep ranch where John Ward worked? This is Mr. Dodd. He has taken his son to the mountains for a holiday. What is a holiday?* Let the children tell some things they like to do on holidays, and write the word on the board. Ask these questions about the picture:

1. What is Mr. Dodd fastening to his shoes?
2. What is he going to do with those two poles standing in the snow beside him?
3. Do you think this is a beautiful place to spend a winter holiday? What makes it look so beautiful? How would it feel to be there?
4. Do you notice that Mr. Dodd is wearing glasses? What kind do you think they are? Why does he need them?
5. Do you see pine trees in the picture? As Mr. Dodd skis *downhill* (write on the board) what will he do if some of those pine trees are in his path?
6. Which way would you cross the slope if you were going downhill? If you were going uphill?
7. Do you think skiing would be lots of fun? What kind of slope would you pick while you were learning, a very steep slope or a gentle one?

**Picture, page 39.** *Here is a picture of the place where John and Mr. Dodd are spending their holiday.*

1. What are these people doing? How can you tell they have probably come here from a distance?
2. Why do you suppose there are so many people here? Do you think they are having a good time?
3. What kind of house do you see? What is it used for? Why is it built so low, and why does it have such a sloping roof?

### Purpose for silent reading, pages 36-39

*Let's read the story about the fun these people have in the mountains in the winter. See whether you think you'd like to spend a holiday there sometime, and whether you think it's easy to learn to ski.*

### Enriching concepts through discussion

After the silent reading let the children tell how skiing is done, how Mr. Dodd climbs a steep slope, and why beginners use gentle slopes. Have the pupils make the sound of wind whistling in their ears.

Make a blackboard list of recreational activities in the mountains: skating, skiing, sliding, climbing, hunting. Discuss why and how the people stay warm and why they must leave for home early. Bring out the fact that there are many hotels like this one which provide work for many people. Encourage the pupils also to imagine how these same spots could be used for recreation during the summertime. Stress the value of mountain lands for resort and recreation.

### Extending geographic ideas learned

1. The stories thus far have shown several ways in which men make a living. Pupils may make a list of the workers about whom they have read, including herder, camp tender, forest ranger, sheep rancher, fire fighter, hotel man. They may draw a small illustration of each man at work.
2. Provide the children with other stories which tell of different kinds of fun to be had in the mountains.

### Independent activities

1. Make a scrapbook of beautiful mountain scenery.
2. Draw pictures showing all the various types of recreation provided in the mountains.

### SUGGESTED TESTS for pages 22-39

#### The forest fire stories

Write these words and phrases on the board and let children select and write the correct answers to the statements below:

wet weather	bare ground	bare slope
dry weather	floods in valleys	tree-covered slope
dead trees	careless campers	sparks
wind	dry grass	lightning
smoke	smokers	prevented
map	high slopes	pasture lands
forests	forest ranger	

1. The ranger knows there is a fire when he sees (*smoke*).
2. To help him tell fire fighters where a forest fire is, the forest ranger uses a (*map*).
3. Forests need to be watched closely during (*dry weather*).
4. Name four ways forest fires are started (*careless campers, smokers, bonfires, sparks from locomotives, lightning*).
5. Name three things which cause forest fires to spread quickly (*dead trees, dry grass and leaves, wind-swept slope*).
6. A forest fire will stop burning when it gets to (*bare ground*).
7. The rain washes the soil down easily from a (*bare slope*).
8. Most fires can be (*prevented*).
9. It is wise to keep mountain slopes covered with (*forests*).
10. Forest fires ruin (*pasture lands*) for sheep.

### Winter fun in the mountains

Write the following words on the board and ask children to select the answers which fit properly into the sentences:

shorter	holidays	willow	skating	swimming
longer	valley	pine	skiing	

1. Many people use the mountains to enjoy their (*holidays*).
2. The skating ponds in the mountains usually lie in a (*valley*).
3. (*Pine*) trees grow well on mountain slopes.
4. Two winter sports enjoyed in the mountains are (*skiing, skating*).
5. Winter days are (*shorter*) than summer days.

### UNIT SUMMARY, pages 40-42

#### Readiness vocabulary

mountain peak	rounded	shelter	mountain range
---------------	---------	---------	----------------

#### Reviewing the unit content

Remind the children that all the stories they have read in *Our Earth* have told them about life in the mountains. *The first stories told us how sheep herders care for their sheep and why the sheep graze in the mountains during the summer months. We learned why sheep are important to all of us and how they give us food and clothing. We learned the difference between mountain lands and valleys. What is this difference?*

*In the next group of stories we learned about the forest rangers. Who was Sam Tyler and what did he do? We learned how men fight forest fires and how maps are used to find where a fire is. The book told us how fires start and we learned why a fire burns so quickly in a forest. We saw how a forest looks after it has burned. How does it look?*

*The last story told us about having fun in the mountains in winter. Now we are going to learn how to describe a mountain so that we will be able to tell mountain land from any other kind of land.*

Have the children read silently pages 40-42 and reread if necessary.

### Enriching concepts through discussion

During the discussion refer frequently to the pictures on pages 1, 21, and 41 to illustrate the principal points contained in the reading. Practically all of this selection should be read orally and should be carefully explained, taking one major thought at a time.

1. To stress the fact that great height is a characteristic of mountains, let the pupils tell what they imagine it would be like to stand on top of a mountain, how it would compare with the highest building they have ever seen, and let them look up at the clouds to get an idea how far into the sky some mountains rise.
- 2 Use the pictures on pages 21 and 41 to point out the tree line and to explain why high peaks are so barren and why they are covered with snow all the year.
- 3 Ask the children to find and read orally the sentence which tells what a mountain is. Draw a sketch on the board to illustrate it.



MOUNTAIN



MOUNTAIN PEAK



MOUNTAIN RANGE



4. Let children draw different shapes of mountains on the board.
5. Read orally the sentence which tells what a mountain peak is. Let someone sketch a peak on the board. Then do the same for a range of mountains.
6. When all the main thoughts have been discussed and explained, have several children give the complete definition of a mountain.

### **Independent activities**

1. Make a bulletin display showing pictures of different types of mountains. They may either be drawn or cut out from magazines. Have the definition printed in large letters and placed over the set of pictures.
2. Using a sand table of moist sand model a range of mountains. Show trees covering the lower ones, and vary the shapes. Include at least one high mountain peak.

### **Excursions for children**

It will often be impossible for country children and city children to take the same excursions. However, these suggestions will indicate the type of trip the teacher can plan according to the facilities available. These excursions may be made any time during the study of the unit.

1. Visit the top of a high hill or low mountain. Note the objects in sight: cities and towns, lakes and streams, other high hills or mountains, railroads and highways.
2. Visit a farm or ranch where sheep may be seen. Note the pastures where the sheep graze, what they are fed, whether or not they make a noise while they are being fed, what buildings are used to shelter them, how many men work with the sheep, and whether dogs help the herder or farmer.
3. Visit a butcher shop to see lamb and mutton and to learn how the butcher keeps meat from spoiling.
4. Visit a woolen mill to see how wool is processed for use in making cloth, yarn, and clothing.
5. Visit a forest and try to talk with a forest ranger. Try to find out what kind of trees grow there, what men, if any, are at work in the forest, and what kind of work they do. If there has ever been a fire in the forest try to learn how it was put out and how the area looks now.
6. Have a campfire picnic in a woods or forest.



## In Hilly Lands, pages 43-72

### Suggested Time Allotment

Page		No. Weeks
45	SUGAR-MAKING TIME	1
51	GATHERING MAPLE SAP	}
54	AT THE SUGARHOUSE	
56	A SUGARING PARTY	
59	ON A DAIRY FARM	2
68	TAKING MILK TO MARKET	}
72	HOW CAN YOU TELL A HILL FROM A MOUNTAIN?	
<hr/>		
Total for the unit		5

### Geographic Concepts to Be Developed

**The major concepts.** The two major concepts which should be constantly kept in mind while teaching all of the stories and which form the theme of the entire unit are:

1. Hills are not so high as mountains.
2. More human activities go on in hilly lands than in mountains.

**The maple-sugar stories, pages 43-58.** The specific geographic subject matter contained in the maple-sugar stories relates to:

1. The meaning of a grove as distinguished from a forest
2. The use of sugar-maple trees
3. The fact that hilly lands can be used for growing sugar maples
4. The process of tapping and why it is done in the late winter
5. How maple sap is gathered
6. How the sap is made into sirup and sugar
7. The fact that snow sledges have runners instead of wheels
8. The idea that this is a kind of work men do to help make a living

**The dairying stories, pages 59-71.** The specific geographic ideas contained in the dairying stories relate to:

1. Kinds of dairy cows
2. The use of hilly lands for pasturing dairy cows
3. What cows eat
4. How cows digest their food
5. Conditions needed for successful dairying, such as cleanliness and hard work by the dairy farmer
6. The use of manure as fertilizer
7. The process of milking
8. The different buildings on a dairy farm and how each is used
9. Products obtained from milk
10. Size of dairy farms as compared with sheep pastures (bright classes only)

### SUGAR-MAKING TIME, pages 43-49

#### Readiness vocabulary

hilly	maple sirup	bucket
sugar-maple tree	hill	drips
grove	loose bark	freezes
maple sap	whines	frozen
maple sugar	hollow tube	

#### Relating the story to the child's experience

Ask the children whether they like pancakes and what they spread on pancakes. When sirup is mentioned, point out that there are different kinds of sirup (molasses, cane, maple) but that maple sirup is especially well liked. Ask whether the children know from what maple sirup is made. Remind them that there is a tree called a maple tree and ask whether any of the children know this tree. Tell them that there is a kind of maple tree which gives us maple sirup. Encourage the children to ask questions about how this is done, reminding them that other trees also give us food. Summarize the results of the discussion in the form of a brief set of questions entitled *Things we should like to know*.

Recall the story "Winter Fun in the Mountains" and ask whether the children think only mountainous lands have snow. Tell the children that many parts of our country have snow in the winter, while others do not, and that the part of the country discussed in the next group of stories has long winters with lots of snow, but no mountains.

**Learning geography from pictures, pages 43, 44**

To foster an inquiring attitude and the habit of keen observation give the pupils time to look at these two pictures reflectively. Encourage the pupils to study each picture by themselves, first with the purpose of observing all the things familiar to them, and second with the purpose of formulating questions they wish to ask about the picture.

**Picture, page 43.** *The man in this picture is Carl Nickerson. He is on his way to look at his maple trees.*

1. What time of year is it? How can you tell? Is the snow deep?
2. Describe the trees in the picture. Why are there no leaves on the trees? Compare them with the trees in the picture on page 4.

**Picture, page 44.** *Here is Carl walking with his dog, Blackie. Is that a good name for his dog?*

1. Where do you think Carl is going?
2. Is he walking uphill or downhill? How can you tell?
3. Is this a fresh fall of snow? How do you know? Is the sun shining? How can you tell? Will the snow melt quickly? Why?
4. What do you think this building is? Is there more snow on the house or on the ground? Which do you think will melt first?
5. Are these trees the same as the trees in the last picture? Does this look like a forest?

**Purpose for silent reading, pages 45-46**

Place on the board the incomplete statements given below. Ask the children to read them to be sure they understand what each means. Have them read pages 45 and 46 to find the answers they do not know.

1. The trees in the pictures are (*maple sugar*) trees.
2. The time of the year is late (*winter*).
3. Because there are not so many trees here as in a forest, this is called a (*grove*) of trees.
4. (*Sugar*) and (*sirup*) are made from the (*sap*) of these trees.
5. Carl picks up the fallen branches so he will be able to (*drive his horse through the grove*).
6. The paths go up and down because the land is (*hilly*).

**Enriching concepts through discussion**

After the silent reading, have the children read orally the sentences which contain the information called for above. Continue as follows:

1. To help in the identification of the sugar-maple tree, show pictures taken in summer and point out the tree's distinguishing characteristics, such as the gray bark, and its dark green leaves which turn yellow, orange, and red in autumn.
2. Discuss why tapping is done at this time of year.
3. Compare the picture of the grove of maples on page 44 with the forests in the pictures on pages 21 and 41.
4. Refer the children to the picture on page 52 to see what sap looks like.
5. If samples of maple sugar and sirup are available, show them to the class.
6. To introduce the concept of a hill, have the children look back at the picture of the mountains on page 41 and review the definition of a mountain given on page 40. Then have them look at the pictures on pages 43, 44, 47, and 55 and notice how the land slopes gently. Stress the difference between a mountain and a hill.

NOTE: To bright groups you may teach the fact that many sugar maples grow in a part of our country called Vermont, where the winters are cold, and that not all kinds of trees could live in a place having such cold weather.

### Learning geography from pictures, pages 47-49

**Picture, page 47.** *This picture shows Carl standing by one of the maple trees. Do you know what he is doing?*

1. What kind of a tool is he using? Have you ever seen a tool like this before?
2. Notice the bark of this sugar maple. How would you describe it?
3. See the other trees in the picture. Are they all as big as this one?
4. Is the land flat or hilly? Is there much snow?

**Picture, page 48.** *Look carefully at the trees in this picture and see whether you can tell what Carl has been doing.*

1. Why did he hang buckets on so many trees? Do you think he will hang a bucket on every tree?
2. Is the bucket he is carrying like those on the trees? How is it different?
3. How many pails are on each tree?
4. Notice the shadows on the snow. What does this prove?

**Picture, page 49.** *This picture gives us a view of the sap in the pail.*

1. What is the pail hanging on? Is the pail near the top or the bottom of the tree?
2. What does the sap look like? Is the pail full?

### Purpose for silent reading, pages 46-49

*Let's read the last part of the story to find out the different jobs Carl Nickerson must do to get sap from his sugar maples.* Have the pupils begin with the last full paragraph on page 46.

### Enriching concepts through discussion

Have the children find and let one child read orally the paragraph which explains and names the kind of work Carl is doing. Then place this title and blank outline on the board:

#### How Carl Taps a Sugar Maple Tree

1. (*cleans a spot on the tree*)
3. (*drives a tube into the hole*)
2. (*makes a small hole*)
4. (*hangs a bucket on the tube*)

Have the children reread silently the paragraph which describes the first process in tapping and let a child tell in one or two words what the first step in the process is. Write it in the blank space on the board. Repeat this method for the other three steps. Then continue the oral reading, finding and reading the answers to the following questions:

1. How many trees does Carl have in his grove?
2. Why does he hang two buckets on some trees?
3. Why does the sap sometimes freeze?
4. Can Carl use the frozen sap?

### Extending geographic ideas learned

Let a few children try pantomiming the steps in the process of tapping a sugar maple.

### Independent activities

Using the pictures in the book as a guide, the pupils may draw pictures of the following:

1. A sugar maple, showing the bark and the shape of the top where the branches are
2. A grove of maples showing the paths going up and down on hilly land
3. Two contrasting pictures, one showing a grove, the other a forest.

## GATHERING MAPLE SAP, pages 50-53

## Readiness vocabulary

hitches

sledge

tank

runners

reins

## Relating the story to the child's experience

Ask the children whether they would rather play indoors or outdoors. Help them recall how it feels to be outdoors in the late winter or very early spring, when the air is cold and crisp. Help them realize the beauty of the woods and the peacefulness of this kind of work. Tell them that Carl enjoys his work in the maple grove because he likes to be outdoors. Tell them he especially likes to go out at this time of year because the winters where he lives are long and cold and he must stay indoors during most of the winter. Then say:

*Now that Carl has hung the pails on all the trees in his grove what do you suppose his next job will be? Let's look at the pictures in the story called "Gathering Maple Sap" and see what we can find out.*

## Learning geography from pictures, pages 50, 52

Picture, page 50. *Here is Carl starting out to gather the sap from the pails on the trees. See him sitting on the sledge? (Teach sledge.)*

1. Describe the sledge in the picture. Do you think the sledge travels easily over the snow? Why? Where are the runners? Do you know what the logs are used for?
2. What is Carl holding in his hands? (Write *reins* on the board.)
3. Why do you think he uses two horses to pull his sledge?
4. He is sitting on a big tank. (Write *tank* on the board.) What do you think he will use the tank for? How do you think he will put the sap into the tank?

Picture, page 52. *What is Carl doing in this picture?*

1. Do you see the lip on the large bucket? What is it for?
2. Notice the sap as Carl pours it. What color is it? Is it thick or thin? How do you suppose it tastes?
3. Look at the pail on the tree. Why is it covered?

## Purpose for silent reading, pages 51-53

*Do you think Carl enjoys his work? Let's read the story to see why he likes his work and how he goes about the job of gathering the sap.*



### Enriching concepts through discussion

In the discussion which follows the reading, let the children describe a sledge. The teacher should sketch the runners and explain how the logs are laid across to hold the tank. Also review the reason a sledge is used. In answering why two horses are used lead the pupils to see that the load is heavy and difficult to pull *uphill*. Have them reread the last sentence in the story, which tells where Carl goes when the tank is full, and emphasize the fact that he goes over *hills*.

See whether the children can figure out why the sap is not so sweet as maple sugar. Have them compare the size of the two buckets in the picture on page 52 and ask why the farmer doesn't put the sap directly into the tank. Refer again to the picture of the tank to find the place where the sap is poured in. Ask about how much the tank would hold.

### Independent activities

Ask the children to count the number of paragraphs (8) in the story and have them list the numbers 1 to 8 on their papers. Write on the board the paragraph headings below, using a different order. Have the pupils reread the story, keeping the headings in mind. Ask them to copy each heading after the number showing its proper place in the series. A correct list will appear as follows:

1. What a sledge looks like
2. Blackie as a good pal
3. The kind of land on which Carl and his horses work
4. How maple sap tastes
5. How Carl gathers the sap
6. How Carl uses the big tank on the sledge
7. Why Carl enjoys his work
8. What Carl does when the tank is full of sap

### AT THE SUGARHOUSE, pages 54-55

#### Readiness vocabulary

sugarhouse	vats	harden	harvesting
pipe	receiving tank	planting	

#### Relating the story to the child's experience

Ask the children how many of them have ever watched their mothers make candy. Have those who have had the experience tell about it,

encouraging them to tell how it looked and smelled while cooking. Tell them that making maple sap into sirup and sugar is much like making candy, and that the next story will tell them how it is done.

### Learning geography from pictures

*Picture, page 55. Here is the place where Carl has taken his tank of maple sap. It is near a small building which does not show in this picture. The building is to the left.*

1. What do you see in this picture? Name all the things you have seen in the pictures before. What do you see that you have not seen before?
2. Do you see two pipes? Are they the same size? The story will tell us what Carl is doing with the pipes.
3. Will it be easy to empty the sap from the tank? How will it be done? Is the pipe running downhill or uphill from the tank?
4. Where do you think the sap will go when it runs through the pipe?

### Purpose for silent reading, pages 54-55

*This story tells us what Carl does after he has gathered the sap from his sugar-maple trees. Let's read to find out where he puts the sap and how he will make it into sirup and sugar.*

### Enriching concepts through discussion

To give further training in the ability to locate facts, place the following questions on the board. Have the children find the sentence which answers each question and let a child read the correct sentence orally while the class follows and checks to see that the proper sentence is read. See that the children read only enough to answer the question.

1. Where is Carl taking the tank of sap?
2. What will he do with the sap in the sugarhouse?
3. What is a receiving tank?
4. How does the sap get from the receiving tank to the inside of the sugarhouse?
5. What is inside the sugarhouse?
6. How does Carl make sirup and sugar?
7. How long must the fires be kept burning under the vats?
8. What does Carl do with his sirup and sugar?

9. Why is it a good thing that sugaring time comes in the early spring?
10. Why does Carl do all this work?

Lead the pupils in a discussion of the principal points raised by each question and answer. To extend and emphasize the concepts learned in the reading the following means may be used:

1. Redirect the pupils' attention to the pictures to explain such things as the vats, the sugarhouse, the pipes.
2. In explaining how sugar is made bring out the fact that experience and skill are needed.
3. Give training in reasoning by asking why Carl must keep the fires burning until the work is done, why he draws his sledge to a spot higher than the receiving tank, and why this work does not interfere with his other farm work.

#### A SUGARING PARTY, pages 56-58

##### Readiness vocabulary

steam      bubbling      outdoors      kettle      rapidly      molds

##### Relating the story to the child's experience

Ask the children whether they like to go to parties. Ask for descriptions of one or two parties which the children particularly enjoyed. Tell them that Mr. Nickerson has two children, Tom and Ann, who gave a very different kind of party. Direct them to the title of the next story, page 56. Tell them the party is held in the sugarhouse where the children gather round the big vats and watch the *bubbling* sap. (Write *bubbling* on the board.) They watch the *steam* rising from the vats and when the sirup is cooked to just the right thickness the children will get a treat. Children who live on maple-sugar farms like to go to sugaring parties.

##### Purpose for silent reading, pages 56-58

*Let's read the story to see what kind of treat the children are going to get. See whether you would like to go to this kind of party.*

##### Enriching concepts through discussion

Open the discussion by asking a child to describe the treat the children were given at the sugaring party. If any child has had this experi-

ence let him tell about it. In talking about the methods of boiling the sap let the children imagine how it feels to be inside a sugarhouse with the odor of boiling sap and the steam rising from the vats. Compare this method with the kettle method and let them find and read orally the sentence which tells why the kettle method is sometimes used. Ask why Mr. Nickerson can't leave the sirup until it's finished and why he must stir it *rapidly*. If possible show the children some molds and cakes of maple sugar. Then let them tell how sirup is made and recall how sap tastes as told in the previous story. Then ask why sirup is sweeter than sap.

### Extending geographic ideas learned

To give practice in organizing ideas, place the following outline on the board. Have the children reread the story and fill in the blanks with the proper statements.

- A. Two ways sap may be boiled
  - 1. (*in a vat*)
  - 2. (*in a kettle*)
- B. What Carl does when he makes sugar
  - 1. (*boils sap to proper thickness*)
  - 2. (*puts it in a pan to cool*)
  - 3. (*stirs it when it begins to thicken*)
  - 4. (*pours it into mold*)
  - 5. (*allows sugar to harden and turns it out*)

At first the pupils may have difficulty in selecting the points and in writing them in. If so, discuss their papers with them, have them try the outline again, and later give them a similar task, thus building the beginnings of ability in organization.

### Independent activities

- 1. A large portion of the class could help make a sand table exhibit of a maple-sugar grove. Appoint small groups to make:
  - a. The hills from moist sand
  - b. The trees from twigs and the pails from bits of paper
  - c. The sledge and tank from cardboard or clay
  - d. The sugarhouse and receiving tank from cardboard or clay
- 2. A small group could plan and prepare a dramatization of the entire story. Scenes may include:

- |                               |                       |
|-------------------------------|-----------------------|
| a. Getting ready for sugaring | d. Making the sugar   |
| b. Tapping the trees          | e. The sugaring party |
| c. Gathering the sap          |                       |

If the children cannot get maple sugar where they live, perhaps they can write a class letter to a class of their grade in Vermont asking for a small sample.

### SUGGESTED TESTS for pages 43-58

#### Test on geographic ideas

In an informal discussion, ask the children to tell how they liked the stories, the parts they liked the best, why this knowledge is useful, and what they have learned about hilly lands.

#### Test on geographic vocabulary

Give the following test as part of the evaluation. It would be wise to hectograph this paragraph, placing at the bottom of the sheet the words to be used in filling in the blanks. Explain that a word need not be used or may be used more than once.

Maple sirup and maple sugar are made from the (*sap*) of (*maple-sugar*) trees. The sugaring season comes in (*late winter*). A tree is (*tapped*) by drilling a hole in the trunk and driving a (*tube*) into this hole. Then a (*pail*) is hung on the tree for the sap to (*drip*) into. The sap is gathered first in a large (*bucket*) and then poured into a large (*tank*), which rests on a (*sledge*). From the maple grove the sap is taken to the (*sugarhouse*). Here it is stored in a (*receiving tank*) until the farmer is ready to use it. Maple sugar is made by (*boiling*) maple sap in either a (*vat*) or a (*kettle*). The sap must boil longer to make (*sugar*) than it does to make (*sirup*). The thick sirup is poured into (*molds*) where it hardens into sugar. The thinner sirup is put up in (*tin cans*).

kettle	molds	sledge
pail	tin cans	sugar
tapped	tube	sirup
sap	bucket	boiling
summer	receiving tank	red maple
late winter	tank	grove
maple-sugar	vat	hill
sugarhouse	drip	



## ON A DAIRY FARM, pages 59-67

NOTE: Teachers can obtain a wealth of excellent material to accompany these stories by contacting a branch of the National Dairy Council.

**Readiness vocabulary**

dairy farm	chew	silage	stanchion
Jerseys	stomach	stalls	milk bag
Holsteins	cud	manure	teats
excite	stray	plow	weighs
winds	stalk	grain	milkhouse
swallowing	silo	feedbox	trough

**Relating the story to the child's experience**

*Our next story is about a man named Mr. Hern who has a little girl just ten years old. Her name is Jane. This little girl has a rather strange pet. We've all heard of dogs and kittens as pets, but hers is different.* Let the pupils guess what Jane's pet might be. *Jane's pet is a cow. Do you think a cow would make a nice pet? Why? Jane named her pet Bess. Where must Jane live to have a cow for a pet? Let's look at the picture of Jane's pet on page 60.*

**Learning geography from pictures, pages 60-61**

*Picture, page 60. Jane's pet, Bess, is the black and white cow in the picture. Bess is a Holstein cow and she gives lots of milk. (Write Holstein on the board.) What color are the other cows in this picture? Do you know what kind of cows they are? The story will tell us what the brown ones are called.* Ask also:

1. What are the cows doing?
2. Does this look like good pasture land? Why?
3. These cows could not live very well in the pastures where sheep graze. Do you know why? Compare this picture with the sheep pictures on pages 1, 4, and 15. Note the difference in the surface and the grassy coverage.

*Picture, page 61. Here is a picture showing more of the pasture land.*

1. What kind of land is this? Is the slope of the land steep or gentle?
2. What are the cows doing here? Notice how they rest. Where do



they put their feet? Do they look comfortable? Do you think it's important that a cow be quiet and comfortable? Why? The story will tell us.

3. Do these cows need water to drink? Where will they get it?
4. The cows lying down are chewing their cuds. (Write *cud* on the board.) Do you know what that means?

### Purpose for silent reading, pages 59-62

Ask a child how many stomachs he has. Then tell the class that a cow has more than one stomach and that the first part of the story will tell them how many stomachs she has and why she chews a cud.

### Enriching concepts through discussion

After the silent reading go back over the story, using the following questions and suggestions. Have a child read orally the part which answers each question. Then, in a conversational manner, talk about each fact read, enlarging upon it, enriching it, and associating it if possible with ideas familiar to the child.

1. On what kind of farm does Jane live? What does a farmer raise on this kind of farm? What does he sell to earn his living? Are all cows dairy cows? (Explain briefly that some cows are raised for meat.)
2. Find the paragraph which names two kinds of dairy cows. (Write the names on the board.) Find in the pictures, pages 60, 61, and 64, each of the two kinds of cows. What color is the Jersey cow? What color is the Holstein cow? (Explain the difference in the quantity and the quality of milk produced by each kind. Holsteins produce a larger quantity of milk than any other breed, but the milk has a lower butterfat content. Jersey milk is yellow and high in butterfat. Note the difference in size also.)
3. At what time of year were the pictures in this story taken? Is it always summer where these dairy cows live? What does the story say about this? (Write the names of the four seasons on the board.)
4. What do dairy cows like best to eat in the pasture? Why? What else will they eat? When will they eat the dry grass?
5. Does a cow eat the same way a sheep eats? Why not? (Refer pupils to the picture on page 9 showing the split lip. Explain why dairy cows could not be raised in the type of pasture which is used for

sheep. But point out that sheep as well as cattle can do better on hilly lands than in the mountains.)

6. Why must dairy cows live in a quiet, restful place?
7. Where do they get water to drink?
8. Describe how a cow eats. (Teach the meaning of *cud* and the number of stomachs a cow has.) Find a cow in the picture on page 61 that is probably chewing its cud. How does the farmer know when a cow is sick?

### Learning geography from pictures, pages 63, 64

Picture, page 63. *Here is a picture of Mr. Hern's barn.*

1. What other buildings do you see in this picture? Where is the silo? Where is the milkhouse?
2. In which part of the barn do you think the cows are kept?
3. What do you think is kept in the silo?

Picture, page 64. *Here are some of Mr. Hern's cows standing near the silo.*

1. How many different kinds of cows do you see? What are they called?
2. Do you see a cow like the one in the picture on page 60? On page 61?
3. Can you tell what part of the farm shown in the picture on page 63 is shown in this picture?
4. Is there anything for the cows to eat in this yard? Why do you suppose they are here?

### Purpose for silent reading, pages 62-64

*Now that Mr. Hern and Jane have turned the cows out to pasture for the day, is their work all done? Do you think Mr. Hern will have to watch his cows as Mr. Ward did his sheep? Let's read the next part of the story to see what Mr. Hern and Jane do all day while the cows are grazing in the pasture.*

### Enriching concepts through discussion

After the silent reading of pages 62-64, continue the conversational method of study, using these questions:

1. What has Mr. Hern done to keep his cows from straying from the pasture? Were the sheep pastures fenced in?

2. How does Jane help her mother? Did you ever taste apple butter? Where did you get it?
3. Why must Mr. Hern work so hard?
4. What does he plant on part of his farm? Why? (Look at the pictures of corn, pages 77, 82, and 87.)
5. Where does Mr. Hern put the corn? Find the silo in the picture on page 63. What part of the corn does he put in the silo? What is the feed in the silo called? (*Silage* is an important geographic word; stress it and write it on the board.) Why will the silage keep well in the silo? When will the cows eat the silage?
6. What chore must Mr. Hern do every day while the cows are in the pasture? How will he use the manure? (Explain how manure is used as fertilizer.)

NOTE: With bright groups compare the size of sheep pastures and cow pastures, and note the sparse vegetation of the dry sheep lands compared with the well-watered lands used for dairying. Explain that a sheep has to graze over a large amount of land to get enough food.

### Learning geography from pictures

Picture, page 66. *What is Mr. Hern doing here?*

1. Where are these cows standing? Do you think they look clean?
2. What is Mr. Hern wearing? Why do you suppose he wears white?
3. Which cow is Mr. Hern milking now? Do you think this is Jane's pet? Will Mr. Hern milk the other cow too?
4. What is Mr. Hern sitting on? What is spread on the floor?

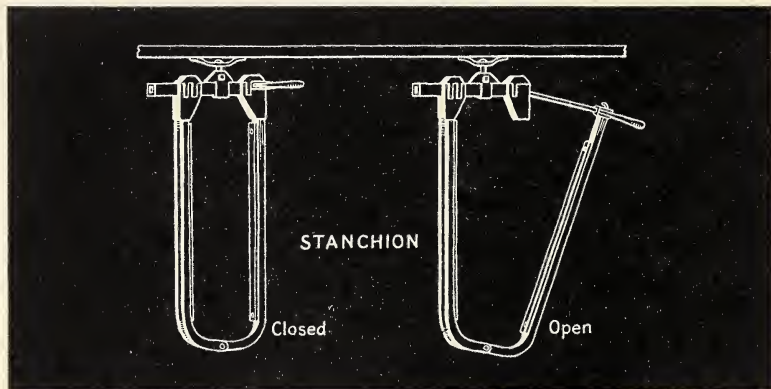
### Purpose for silent reading, pages 65-67

Ask whether anyone has ever tried milking a cow. Let him tell as much of the process as he can. If a new word is mentioned write it on the board. Appeal to the pupils' curiosity by asking whether they know what a stanchion is, which building in the picture on page 63 is the milkhouse, where the cows would be milked, and how a cow could be milked by a machine. Then tell them that the last part of the story will give information about these things and direct them to read it silently.

### Enriching concepts through discussion

Ask the following questions about the story and have the answers read orally. Discuss fully the concepts brought out by the answers.

1. At what time of day does milking time come? Is this the only time of day the cows are milked?
2. Why are the cows willing to leave the pasture as Mr. Hern opens the gate?
3. What is a feedbox? Has anyone ever seen one? What does it look like? In what part of the barn are the feedboxes kept? What kind of feed is put into them?
4. What else does the cow find in her stall? Find the stall in the picture on page 66.



5. Did you find out what a stanchion is? Could someone sketch one on the board? (If not, the teacher should do it.) Why are stanchions necessary?
6. Name six things Mr. Hern must do before he milks a cow. (Puts stanchion on cow, brushes cow, washes milk bag, washes own hands, puts on white coat, puts stool on right side of cow. As each step is read, have a child keep count on the board.)
7. How does Mr. Hern keep his barn and cows clean? Why is this important?
8. Do you think it would be easy to milk a cow? How many teats does Mr. Hern milk at a time? How many teats does a cow have?
9. Why does Mr. Hern weigh each cow's milk?
10. Where is the milk kept until Mr. Hern is ready to take it to market? What is it like inside the *milkhouse*? Why does Mr. Hern cool the milk?
11. How is a cow milked by machine?

**Independent activities**

1. Make a list of things to eat in which milk is used.
2. Show by means of drawings what a dairy farm is like. Include these things in the drawings:

stanchion

stall

Jersey cow

plow

Holstein cow

cornstalk

silo

pasture

3. Make up a short story about Jane and her pet, Bess. Use some of the things you see in the pictures on pages 60, 61, 64, and 66, in your story.

**TAKING MILK TO MARKET, pages 68-71****Readiness vocabulary**

market

snowplow

provide

cheese factory

dairy farmer

**Relating the story to the child's experience**

*In the last story we left Mr. Hern cooling the big cans of milk in the milkhouse. He has much, much more milk than he and his family can use. What do you suppose he is going to do with all this milk? How many of you like to drink milk? Where do you get the milk you drink? It probably comes to the store from a dairy farm like Mr. Hern's. In the next story we will learn what Mr. Hern does with all the milk he gets from his cows. But first look at the picture and see what you can learn.*

**Learning geography from pictures, pages 69-71**

**Picture, page 69.** *This picture shows Mr. Hern loading some big cans on a truck.*

1. What do you think is in the cans? Do the cans look light or heavy?
2. Where is the milkhouse? Look at the picture on page 63. Do you see the milkhouse? Show in this picture the place where the truck will be parked.
3. Do you see part of the silo and the barn? Find them in the picture on page 63.
4. Whose truck do you suppose this is?



**Picture, page 70. *Here is Mr. Hern on the road with his milk.***

1. Is this a good road? Are good roads important to this farmer? Why do you think so?
2. How are the cans fastened on the truck?
3. Where do you think the other truck is coming from?
4. What kind of land do you see? Compare it to the picture on page 27. Which truck do you think will be able to go faster? Why?

**Picture, page 71. *Here is the place where Mr. Hern has brought his cans of milk.***

1. What kind of a place do you think it might be?
2. How is Mr. Hern unloading his truck?
3. Do you think he will take anything back with him in the truck? What will he take?

### **Purpose for silent reading, pages 68-71**

*As you read the story you will find the answers to all of the questions on the board. Let's go over the questions first to see that you understand what you will need to know to help in the discussion after the reading.*

Have the following questions on the board:

1. What will be done with Mr. Hern's milk?
2. Why are good roads needed where Mr. Hern lives?
3. How is the road to the factory different from a mountain road?
4. Where is the other truck coming from?
5. Where is the cheese factory? Why was it built there?
6. How often does Mr. Hern take his milk to market? How does he get through the road in winter?
7. Will Mr. Hern receive money for his milk?
8. What is the name of Mr. Hern's kind of work?
9. Someone has said that a dairy farmer's work is never done. Is that true? Why?
10. How do other dairy farmers sometimes sell their milk?

**NOTE:** As the class reads, give special help to retarded pupils so that they will have ideas to contribute later.

### **Enriching concepts through discussion**

Following the silent reading, let the children answer the questions, referring to the text and the pictures when needed to clarify a point.



**Extending geographic ideas learned**

1. An interesting bulletin board showing a dairy farm may be made, each member of the class making cut-out pictures of the buildings and animals.
2. The class may make a list of things to eat in which cheese is used.

**UNIT SUMMARY, page 72****Reviewing unit content**

Have the children review the title of the unit on page 43 and recall that the stories about maple-sugar and dairy farms told about how people can make a living in hilly lands. Review the pictures in the unit. As this is being done, call on various children to tell everything they can observe about the land, including the facts that trees or grass grow on it; that some of the pictures are winter scenes and some are summer scenes; that the land slopes; and that some of it is used for grazing. Then refer the children to the title of the summary story on page 72. Ask them to read the page silently to find the following information. Have these items already on the board.

1. What is a hill? How is it different from a mountain?
2. Why do some hills look different from others?
3. Can you find three uses for hilly lands? Compare these with the uses for mountains which you have learned.
4. On which kind of land would you see the most houses and the most people at work?

**Enriching concepts through discussion**

Have the children answer the four questions. With help from the text have them formulate a definition of a hill. Let a child try sketching a hill and a mountain on the board. In describing the various types of hills refer again to pictures in the unit which illustrate the point.

**Excursions for children**

1. Visit a near-by grove of trees, if possible a grove of sugar maples, and note its distinguishing characteristics.
2. Observe hills which may be in the vicinity and note how they are utilized—pasture, growing of food, or woods.
3. Visit a maple-sugar farm and observe the processes of tapping trees and making maple sugar and maple sirup.

4. Visit a dairy farm at milking time to see the cows brought in from pasture and milked.
5. Visit a creamery to see how the milk is put into bottles.
6. Visit a large dairy or food store to see different dairy products such as butter, cheese, canned milk, and raw milk.
7. Visit a cheese factory to see how cheese is made.

### SUGGESTED TESTS for pages 59-72

#### Test on geographic ideas

Place the following list of words on the board. Read the statements to the class and have them select and copy the words called for in the blanks.

beef cows	two	mountains	hand
dairy cows	four	hills	machine
hot	summer	dairy farmers	milk
cool	all year	herders	silage
speed	barn	water	butter
clean	milkhouse	feed	cheese
living	silo	weighs	cud

1. All cows raised for their milk are called (*dairy cows*).
2. In milking cows it is important for the cows, the barn, the farmer, and everything he uses to be (*clean*).
3. A cow has (*four*) stomachs.
4. A soft ball of food in a cow's stomach is called a (*cud*).
5. Dairy farmers work (*all year*).
6. Chopped up corn feed stored in a (*silo*) is called (*silage*).
7. Cows may be milked by (*hand*) and by (*machine*).
8. The dairy farmer may decide to change a cow's feed after he (*weighs*) her milk.
9. Milk is cooled in the (*milkhouse*).
10. Grassy (*hills*) make good pasture lands for dairy cows.
11. The men who keep cows for milk are called (*dairy farmers*).
12. Milk which we get from dairy cows is used to make (*butter*) and (*cheese*).
13. To give lots of milk, cows need plenty of (*feed*) and (*water*).
14. A farmer takes care of dairy cows so that he may make a (*living*) for himself and his family.

## Stories of the Plains, pages 73-112

### Suggested Time Allotment

Pages		No. Weeks
75	RAISING CORN	2
90	WORKING ON A CORN FARM	1
98	WHAT JOHN AND MARY SAW ON THE DESERT	1
107	ANIMALS THAT LIVE ON THE DESERT	1
112	WHAT IS A PLAIN?	
<i>Total for the unit</i>		<hr/> 5

### Geographic Concepts to Be Developed

The major concepts:

1. Plains are the near-level lands of the earth.
2. Plains are not perfectly flat and are often gently rolling. They may be at either low or high altitudes.
3. Plains are easy to travel over.
4. Plains are not all equally useful. The fertile, well-watered plains of our country are highly important for farming. Here you will find people at work, whereas in desert lands people are clustered only at the wet spots.
5. Not all plains are the same. Some plains are forested, some are grassy, some are used for raising crops, some are not used at all.
6. Water is scarce in deserts. People can live only where there is water.
7. Most plains support more people than do mountainous lands.

### Surveying the unit

Have the title of the unit read orally. Write the word *plains* on the board and have it pronounced. Recall the types of land forms previously studied and tell the pupils that this unit will explain how plains are different from mountains and hills. To give the pupils a

general idea of the content of the new unit, give them time to look over the illustrations, calling attention especially to those which show a good view of the surface of the land. Compare these with pictures showing mountains and hills. Compare them also with the locale in which the children live. Have the title of the first story read orally. Tell the children that this story tells some of the things people do for a living on lands called plains. Draw attention to the fact that not all plains look alike by comparing the farming pictures with the scenes taken in the desert.

### RAISING CORN, pages 73-89

#### Readiness vocabulary

plow	weeds ( <i>plants</i> )	hogs	windmill
tractor	cornstalk	pork	well ( <i>in the ground</i> )
endless-belt track	pigs	lard	tassels
harrow	snouts	ear ( <i>of corn</i> )	corncrib
level	pigpen	corn knives	corn-picking race
moist	sows	clover	husks

#### Relating the story to the child's experience

Remind the children that the food we eat comes from plants and animals, both wild and tame. *Many men make their living by raising plants and animals to be used for food. Places where this food is raised are called farms and much of the food you eat comes from farms like the one about which you are going to read.*

#### Learning geography from pictures, pages 73, 74, 77

Picture, page 73. *This is Harry Reed, a farmer, who is working with his tractor.* Write *tractor* on the board. Ask how many children would like to ride on a tractor, and if any child has had the experience, let him tell about it. Ask about the noise a tractor makes. Continue with these questions concerning the picture:

1. Does the tractor have wheels? Some tractors have large wheels with wide balloon tires. Others have an endless-belt track. (Explain the words *endless-belt track*, somewhat as follows:

As you know, the small wheels on automobiles sink down into the ground in wet or muddy places. Then when the automobile tries to go forward, the wheels spin. The large tires of tractors

do not sink into the ground so far. To prevent tractors from sinking into muddy places, endless belts are also used. An endless belt is shaped very much like a wide rubber band but it is made of metal links instead of rubber. This belt turns around a box-like frame on the side of the tractor and is driven by small cog wheels set in this frame. It is called an endless belt because you cannot see where it begins or where it ends. If you look at a wheel on an automobile, you can see that only a very small part of the tire touches the ground at one time. But an endless belt makes a long, wide track for the weight of the tractor to rest upon and keeps it from sinking into the ground.)

2. What is the tractor pulling? (Teach the word *plow*.) What does the plow look like? What is it doing to the ground?
3. Notice the difference between the ground which has been plowed and that which has not. What color is the plowed ground? What happened to the crop when the ground was plowed?
4. Is this kind of land easy to plow? Why? Would it be possible to use these machines in mountain lands? Let's look at the pictures on pages 6, 21, and 41 to see whether we think so or not. Can tractors be used on hilly lands? Look at pages 48, 60, and 61. Let's find the paragraph on page 72 again which tells us about plowing hilly ground.

**Picture, page 74. *Here is part of Mr. Reed's farm.***

1. In what time of year was this picture taken? How can you tell? (Draw attention to the flowers in the foreground, the leaves on the trees, blue sky, etc.)
2. What would you say about the size of this farm?
3. Are there many trees here? Why not? (Point out that farms are either in places where not many trees grow or where the land has been cleared of trees.)
4. Has Mr. Reed planted more than one crop in these fields? What do you think the crops might be?

**Picture, page 77. *Here is the part of Mr. Reed's farm where he planted his corn.***

1. Do the plants look healthy? What makes them grow so well?
2. How tall is the corn? What is in the picture to measure this by?
3. Why can you see so far in this picture? Look at the picture on page 61. In which picture can you see farther?

**Purpose for silent reading, pages 75-77**

Ask the children to read to find out more about what Harry Reed grows on his farm and what he must do to make his crops grow well.

**Enriching concepts through discussion**

Place on the board or distribute individual copies of the following topics with their accompanying sets of questions. Divide the pupils into six groups and assign each group a topic for preparation.

**A. The Tractor**

1. Study the picture of the tractor and be able to describe it.
2. What are endless-belt tracks?
3. What kind of engine does a tractor have?
4. What makes the engine go?
5. Where does the farmer sit?
6. For what are tractors used?

**B. The Plow**

1. Study the picture and be able to describe the plow.
2. What does the plow do to the ground?
3. How is it pulled?
4. At what season of the year did Mr. Reed plow his cornfield?
5. Why is Mr. Reed's field easy to plow?

**C. The Harrow**

1. What does a harrow look like?
2. When is it used?
3. What does the harrow do to the soil?
4. How is it pulled?
5. How does the field look after it has been harrowed?

**D. Planting the Corn**

1. When is the ground ready for planting?
2. What color are the grains of corn?
3. How does Mr. Reed plant the grains of corn?
4. What pulls the machine that does the planting? What two things does this machine do?

**E. What Corn Needs to Make It Grow**

1. What happened a few days after the corn was planted?
2. How often do the growing corn plants need showers?
3. What else helps the corn to grow?
4. Why does the corn grow all night?
5. How tall do the stalks grow?



## F. Weeding the Cornfield

1. What is a weed?
2. Who helps Mr. Reed weed the field?
3. What kind of machine does John Reed use? How is it pulled?
4. What does the machine do?
5. What kills the weeds?

NOTE: The following additional questions may be asked of good workers:

## B. The Plow

1. How do you think farmers plowed their land before they had this kind of machine?

## D. Planting the Corn

1. Can you think of a good name for the machine that plants the corn?

## F. Weeding the Cornfield

1. Why does John weed the field while the corn is small?

Let the group reporting sit on chairs placed in a semicircle facing the class. If the procedure is unfamiliar to the children, the teacher should sit with the group and guide the discussion. To provide for individual differences in reading ability, ask the slower pupils to tell what they can about the subject first, encouraging the more capable pupils to fill in the missing information, make the inferences, and perhaps add their personal experiences. At the end of each group report, members of the class should be allowed to ask questions, make corrections and additions. The group should summarize the main facts learned from the discussion.

**Purpose for silent reading, pages 77-81**

Ask the children whether they like to eat chicken. Tell them the next part of the story tells about raising chickens on the Reed farm. They will learn where chickens roost (write *roost* on the board), what they eat, and who gets the money from selling the eggs. Using the form of a riddle, tell the pupils that Mr. Reed also raised some animals that have short thick bodies, short legs, and noses that are called snouts, with which they root in the ground. Write the words *snout* and *root* on the board. Let the children guess what the animal is and tell what they think the new words mean. Then direct them to read the story silently.

**Learning geography from pictures, pages 79, 80**

**Picture, page 79.** *This picture shows some of Mrs. Reed's chickens.* As the children talk about the picture, let them refer again to the text for needed information and read orally the sentences containing important geographic information. Ask these questions:

1. Who takes care of the chickens? Why does Mrs. Reed raise them?
2. What do these chickens eat?
3. Where are the chickens kept?
4. What is the name of the building you see in the picture?
5. With what are the windows covered? Why are they covered?
6. What is inside the chicken house?
7. How does Mrs. Reed gather the eggs? What color are they?
8. To whom does she sell the eggs?

**Picture, page 80.** *Look at this picture by yourselves a few minutes to see if you can make up a little story about it. You may use the facts you read in the book when you tell your story.*

After a few minutes, call on several children to tell their picture stories, while the others look at the picture. The following points should be included:

1. A description of the pigs
2. How they eat, what they eat, and why corn farmers raise them
3. Where the pigs are kept
4. The distinction between pigs, sows, and hogs
5. The kind of meat we get from hogs
6. How the fat from hogs is used

**Purpose for silent reading, pages 81-86**

*Do you remember Mr. Hern's dairy farm? Do you recall the tall round building near the barn? What was it called? What did Mr. Hern keep in his silo?* If necessary turn back to page 63. Find the silo and have someone reread the paragraph about silage on the same page. Then direct the children to page 81 and tell them that the next part of the story will tell them how Mr. Reed's son, John, and a hired man prepare the cornstalks for silage.

**Learning geography from pictures, pages 82, 84, 85**

**Picture, page 82.** *The man with the big knife works for Mr. Reed every summer. His name is Ben.*

1. What is Ben doing? Do you know what this kind of knife is called? Why does he need such a big knife? Why does he wear a hat? What else in the picture shows that the weather is very warm?
2. John Reed is picking up the cornstalks from the ground. What will he do with them?
3. Compare the corn in this picture with that in the picture on page 77. Which plants are taller?
4. Will the men cut all of the corn now? Why not?

**Picture, page 84. *Can you tell now where John was putting the cornstalks in the last picture? Do you see Ben working?***

1. Can you see where John and Ben have already cut the corn? Notice the stubble left in the field.
2. When they fill the wagon where will they take it?
3. How can you tell that the load will be heavy?
4. What do the horses have on their backs? Why?

**Picture, page 85. *This is a picture of Mr. Reed's farm buildings.***

1. How many buildings can you name in this picture? (Note the water tower. Use the picture on page 63 for reference to a silo.)
2. What is the tallest thing in the picture? (Write *windmill* on the board.)
3. Why do you think Mr. Reed needs a windmill on his farm? Do you know how it works? See the watering tank in the right-hand corner of the picture. What animals do you think drink here?

### **Enriching concepts through discussion**

Place the following list of words on the board. Have the pupils, using this list as a guide, weave the information they have read into a story which they can tell. Then ask them to suggest a title for the story.

green cornstalks

machine

silage

corn knife

silo

pickles

wagon

clover

farm animals

Use the following questions to include other important points in the discussion:

1. Why is a windmill needed on Mr. Reed's farm?
2. What turns the wheel?
3. Where does the water come from?
4. What brings the water up from the well?

**Purpose for silent reading, pages 87-89**

*Let's read the next part of the story to find out what happens in the fall to the corn that has not been cut. You will find out also about a party Mr. Reed has for his neighbors.*

**Learning geography from pictures, page 87**

**Picture, page 87.** *Do you think a cornfield would be a good place for hide and seek?* If anyone has had the experience let him tell about it. Then ask the following questions about the picture:

1. How many ears of corn can you see? What do they grow on?
2. What color are the cornstalks? Where are the grains of corn?
3. Do you know what the covering on the ears is called?
4. Look at the top of the cornstalks. What is that part of the stalk called? How is this corn different from that on page 77?
5. Do you think these ears are ripe enough to pick? How does the farmer gather his corn?
6. Where does Mr. Reed store the ears?

**Enriching concepts through discussion**

Have the study guide given below placed on the board. Allow the children time to study so that they will be able to supply the information to fill in the sub-points of the outline. Encourage them to use their own words in discussion.

**A. The parts of a corn plant**

- |                     |                      |                      |
|---------------------|----------------------|----------------------|
| 1. ( <i>stalk</i> ) | 3. ( <i>husk</i> )   | 5. ( <i>grains</i> ) |
| 2. ( <i>ear</i> )   | 4. ( <i>tassel</i> ) |                      |

**B. When the ears are ready to be gathered**

1. (*in the fall*)
2. (*when the stalks and ears are dry*)

During the description of the cornstalk, have each part pointed out in the illustration on page 87. Be sure the children can distinguish between the cutting of the silage and the gathering of the ears. Point out also the difference in purpose between a silo and a corncrib.

Continue the discussion with these questions:

1. What kind of wagon is used in gathering the ears? How many horses pull the wagon?
2. Where do the men walk while they are picking the corn? How do they pick the ears? Where do they put them?



3. What does the corncrib look like? How do the men put the ears into the corncrib? Why does it have wide cracks in its sides?
4. Where is the corn-picking race held? What must the men do to win the race?
5. What is a husking bee? Where did the race take place? What must the men do to win this race?

### Independent activities

- (1) Draw or copy a picture of an ear of corn without the husks.
- (2) Draw and label a silo, a barn, a corncrib, and a chicken house.
- (3) Make a list of the ways in which you have eaten corn.
- (4) Make a list of animals that give us food.
- (5) Write a title for each of the nine pictures on pages 73-87.

### WORKING ON A CORN FARM, pages 90-97

#### Readiness vocabulary

cattle	strawstack	calf	vegetables
beef	wheat	alfalfa	hoe
meal ( <i>as feed</i> )	shock	hay	

#### Relating the story to the child's experience

Sketch a strawstack on the board and let some pupil explain what it is. Then write the word above the sketch and ask whether anyone has ever played on a strawstack or whether they think it would be fun to play there and why. Tell them Mr. Reed has a strawstack on his farm. Direct them to the picture on page 91 to find the strawstack.



**Learning geography from pictures, pages 91, 92**

Picture, page 91. *Here is a picture of Mr. Reed's cattle. Write cattle on the board. What else do you see in the picture?*

1. For what could Mr. Reed use this big strawstack?
2. Where do you think he got the straw?
3. What do you think these animals are eating?

Picture, page 92. *Here are Mr. Reed's cornstalks after they have been cut. How are these stalks different from the corn in the picture on page 87?*

1. Do you know what stacks of cornstalks are called? (Write the word *shock* on the board. Help the pupils pronounce it correctly.)
2. Do you see any ears? What else do you see in the picture?

**Purpose for silent reading, pages 90-93**

*Let's read the first part of the story to find out how Mr. Reed takes care of his cattle. See whether you can discover any difference between the place where these cattle graze and the pasture on Mr. Hern's farm. Have the children read through the first paragraph on page 93.*

**Enriching concepts through discussion**

Have the children go over the story, reading orally the sentences which answer the following questions. If the sentence needs further explanation for proper interpretation, take time to discuss it before going to the next question.

1. What are the animals in the picture on page 91 called? Who takes care of them?
2. Why does Mr. Reed raise them?
3. What is their meat called? (Write *beef* on the board and recall the taste of roast beef, steaks, hamburger.)
4. Where do Mr. Reed's cattle graze? How is this different from the place where Mr. Hern's cattle grazed? (See pictures, pages 60 and 61.) How is it different from sheep grazing? (See pictures, pages 1 and 4.)
5. Which sentences tell us that the cattle are well fed? Why are they so well fed?
6. Where did Mr. Reed get these cattle? Why weren't they fat when he got them? Do you remember where John Ward got his sheep? Do you think a cattle ranch is like a sheep ranch? In what way do you think they would be different?



7. What will Mr. Reed feed the cattle in the wintertime? What will he do with them in the spring?
8. What else do cattle eat besides corn and meal?
9. What is straw? Where does it come from? What color is it?
10. How are the dry cornstalks cut?
11. How are they stacked? What are the stacks called?

### Extending geographic ideas learned

At the end of the lesson, have the children make a list of the most important facts they have learned. This may be done individually, with each child making his own list, or as a group with various children contributing the items and the teacher writing them on the board. The following items should be included in the list:

- A. Beef cattle
  1. Raised for meat
  2. Kinds of food they eat (corn, meal, silage, straw)
- B. Wheat
  1. Wheat straw used for cattle feed
- C. Corn
  1. Made into silage when it is green
  2. Ears are gathered and stalks are shocked in the fall.

### Purpose for silent reading, pages 93-95

With the children's help, list on the board all the different things Mr. Reed raises on his farm as told in the story thus far. Organize this list under two headings, "Animals" and "Plants." Tell the pupils that the information on the next two pages will help them complete the list so that they will know what is grown on the usual corn farm. Ask the pupils to be ready to complete the list after the silent reading.

### Learning geography from pictures

Picture, page 93. *What animals do you see in this picture? What kind of cow is this?*

1. What is the baby cow called? (Write *calf* on the board.)
2. How did John teach the calf to drink milk from a bucket?
3. What will the calf eat when it gets older? Would you like a calf for a pet?
4. How is this pasture different from the one shown in the picture on page 61?

### Enriching concepts through discussion

To complete the lists begun above ask the following questions:

1. What is alfalfa? In which of our lists shall we place it? What does it look like? How does it smell? When is it cut? What is hay?
2. Why does Mr. Reed grow so much feed? What animals must be fed? Do we need to add the names of any animals to our list?
3. What does Mr. Reed grow for his family to eat? In which list shall we place it? Who can name all the kinds of work the farmer does in growing his vegetables? (List the steps on the board.)
4. What work does the farmer do in winter?
5. Have a pupil read orally the lists of animals and plants from the board. Various children may tell briefly the main facts they have learned about each thing listed.

### Introducing a pictorial diagram preparatory to map reading

The pictorial diagrams used in this book are particularly designed to be used in preparing pupils for the study of regular maps. Because of the concrete nature of these diagrams, they awaken interest in the use of maps and aid in developing the idea of what a map is. As pupils become familiar with this type of diagram, the transition to real maps should be made with comparative ease. Begin as follows:

*You have seen many lovely pictures in this book. Have you enjoyed looking at them? Do you think they are helpful to you? In the last part of the story called "Working on a Corn Farm" you will notice a new kind of picture which we haven't seen before in this book. As you look at it, see if you can discover how it is different from the other pictures we have seen.* Direct the pupils to page 97.

*This is a picture of Mr. Reed's farm. How much of the farm do you see? From where are we looking at the farm? How do you know we are looking down on the farm? Notice the roofs of the buildings, the treetops, the fence posts. How is this picture different from the others you have seen in this book?*

*The story on page 96 will explain this picture to you. Read it carefully and see whether you can find in the picture all the things mentioned in the story.*

### Learning geography from a pictorial diagram, page 97

To teach the children how to identify objects and places in a diagram, ask these questions:

1. Where are the cornfields? The alfalfa fields? The wheat field? The pasture? The pigpen?
2. Where are the sheds? The silo? The barn? The house? The windmill? The orchard? The road?

To help the children orient themselves and locate objects and places in relationship to one another, present these problems:

1. Suppose you were at the house. What fields would you pass to reach the pasture?
2. How do the animals reach the pasture from the barn?
3. Which fields are farthest from the road?
4. How did John drive his wagonload of cornstalks to the silo?

Teach a further aspect of diagram reading by asking these questions about relative sizes:

1. Does the farmer have more land planted in corn or in wheat?
2. Does he raise more animals or more crops?
3. Which is the largest building?

### Independent activities

1. Using the pictorial diagram as a guide, make a small model of Mr. Reed's farm. (This can be done by each child at his seat, or a group of pupils may make a single model, working at a table.)
2. Make an illustrated list, giving in the proper order the various steps in raising corn.
3. Make a list of the buildings on a corn farm and state the use of each.
4. Draw a picture of each kind of animal kept on Mr. Reed's farm. After each picture write what the animal eats.

### Excursions for children

1. Take a walk in the country over level or near-level land.
2. Visit a near-by farm, preferably a corn farm, and note the farming activities in process at that time of year—young corn being planted, full-grown corn ready to harvest, dried ears in the crib, corn shocked in the field. Talk with the farmer about his work and notice buildings, animals, and machinery.
3. Observe good corn-growing weather where the children live.
4. Plant corn in the school garden and watch its growth.
5. Visit a meat market and see cuts of beef and pork.

## WHAT JOHN AND MARY SAW ON THE DESERT, pages 98-106

## Readiness vocabulary

desert	Joshua trees	salt water
roots	camels	dry lake
moisture	Arabs	drill ( <i>a machine</i> )

## Relating the story to the child's experience

Recall the conditions needed for successful corn growing, as learned from the previous story. Stress the importance of rainfall to all of Mr. Reed's activities. Tell the children that the next story tells about a trip taken by the Baker children to some plains where there are no farmers, and no herders with their sheep. Ask the pupils what kind of land they think this would be. Tell them it is land which will not grow crops or grass and that the story will tell them why. Write *desert* on the board. Then let the pupils tell what they think a desert might look like. If possible, show the pupils pictures taken in the Sahara. Recall the movies which children have seen showing deserts. Point out that not all deserts are alike. Camels are seen on some and not on others. Sand dunes are found on some and not on others. Also some deserts are much hotter than others. But all deserts are alike in having few plants.

## Learning geography from pictures, pages 99, 101, 102

Picture, page 99. *Here we see level land stretching toward the mountains.*

1. Did you ever see a tree like the one in this picture? Would you like to know its name? (Teach the words *Joshua tree*.)
2. Are there many trees here? Do you know why not?
3. Look at the bushes. Do they grow close together or far apart? What do you see between them? Are they very large?
4. Do you think these plants will need some water? Do you think there is much rain here? Why don't you think so? The story will tell us about water on the desert.
5. Compare this picture with those on pages 41 and 74. Stress the greenness of the earlier pictures, the different vegetation, presence of snow on the high mountain in the picture on page 41, the planted crops in the picture on page 74, the strange desert plants. Then point out similarities—the flatness of the land in the

pictures on pages 74 and 99; the mountains in the pictures on pages 41 and 99.

**Pictures, page 101, 102.** *Here is the Baker family's automobile, parked near a large Joshua tree. Do you see other trees in the picture?*

1. Does this desert land look the same as that in the last picture? What did you see in the last picture that you do not see here?
2. What plants do you see that were not shown in the last picture?
3. Look at the flowers in the picture on page 102. In what way does the desert look different when the flowers are blooming?
4. How would you describe the trees in these pictures?
5. Look at the sky. What kind of a day is it? What time of the year do you think it might be?

### **Purpose for silent reading, pages 98-103**

*Let's read the first part of the story to learn why most plants and trees cannot grow on the desert.*

### **Enriching concepts through discussion**

Have the children answer these questions. Make use of previous pictures showing well-watered lands to provide needed comparisons.

1. Why is this land called a desert?
2. Why does each desert plant need so much space to grow? Why are its roots so long?
3. What are the names of the trees in the pictures? How does the story describe them?
4. In what part of the desert do the flowers grow? How do they grow? For how long do they bloom? Why?
5. Why didn't John and Mary see camels or Arabs in this desert?

### **Purpose for silent reading, pages 103-106**

Ask the children what their idea of a lake is. *How many are quite sure that a lake has water in it? The last part of this story is going to tell you about a lake that has no water in it. Would you like to know why this lake has no water? Let's read the rest of the story which tells us about it.*

### **Enriching concepts through discussion**

Ask the following questions, having the answers read orally, the information explained, and the interpretation extended:



1. What is a dry lake? Why won't plants grow in a dry lake? What is salt water? (Have the pupils point out the dry lake in the picture on page 103.)
2. How tall were the bushes Mary saw? Why do they grow so far apart? (Refer to the picture of the cornfield on page 77 as a means of comparison.)
3. Why isn't this land used for sheep raising? (Compare the sheep pasture on page 4 with the desert on page 99.)
4. Read the part which tells about the green spot in the desert. Why do so many plants grow here? Why does the stream dry up? Put your finger on this green spot in the picture on page 105.
5. Why do so few people live in the desert? Where do these few people get their water? (Explain the meaning of *spring*.)

NOTE: For bright groups, the use of irrigation may be explained.

### Independent activities

Pupils may make a movie strip introducing John, Mary, and Mr. Baker and showing in sequence what they saw on their trip to the desert. For example, Joshua trees, spring flowers, a dry lake, a green spot, and mountains in the distance.

## ANIMALS THAT LIVE ON THE DESERT, pages 107-111

### Readiness vocabulary

jack rabbit	juice	howling
hind	coyote	horned toad
thorn	desert squirrels	store ( <i>put away</i> )
cactus	mice	lizard

### Relating the story to the child's experience

Have the title of the story read orally. Ask the pupils how they think it is possible for animals to live on the dry land of the desert. Have them look again at the pictures of the desert. Remind the children of the stories of sheep herding and ask where the sheep got water to drink. *Where do you think animals could find water on a desert? If only a few plants can grow on the desert, what would the animals eat?* Help the children realize that not all animals need the same kind nor the same amount of food and water. Then direct them to the picture on page 109.





### Learning geography from pictures, pages 109, 110

Picture, page 109. *What do you see when you first look at this picture?* Let the children talk about the flowers they see. *There is also a little animal in the picture. It is a horned toad.* Write *horned toad* on the board and teach it. *You will have to look very, very carefully to see it because it is the same color as the ground. Where do you think the toad is in this picture?* Call the children's attention to the group of brown spots in the center of the picture, and draw an outline on the board, the shape of a horned toad. *The brown spots are on the toad's back. See how much like the ground the toad looks. Do you think it would be easy for this toad to hide?*

Picture, page 110. *Here is a picture of a lizard, another animal that lives in the desert.*

1. What color is the lizard? What does its skin look like? How do you think its skin would feel if you touched it?
2. How big do you think the lizard is? How can you tell? Is its tail long or short? How many toes does it have?
3. See its powerful legs. Do you think it can run fast?

### Purpose for silent reading, pages 107-111

*There are some other interesting animals mentioned in the story. Let's read it to find out their names and how they are able to live on the desert. See how many of the animals you already know.*

### Enriching concepts through discussion

Have the children describe the appearance of each animal mentioned in the story and tell about its habits. Include these points:

1. Where the animals get food and where some of them store it
2. Their use of the cactus as food and drink
3. Their various means of protection
4. Why so many of the animals live underground during the day
5. The sudden change of temperature after sunset in the desert

**Independent activities**

1. Joshua trees make excellent subjects for children's art work. They are most attractive done in colored chalk or paints.
2. Various children may draw scenes to fit into a scrapbook. The scenes may include:
  - The desert in bloom
  - A dust storm
  - A diagram showing the length of the plant roots
  - The dry lake
  - The green spot with its stream
  - Animals and birds of the desert
3. If modeling clay is available, the pupils may make models of each desert animal.
4. Pupils may list things in the desert pictures (pages 99, 103, 105) which show that little or no rain falls on the land.
5. Pupils may make black-and-white sketches to illustrate a forest, a pasture, a desert, a field planted in crops.

**UNIT SUMMARY, page 112****Reviewing unit content**

Have the following incomplete outline placed on the board:

- A. What is a plain?
  1. (*level, gently rolling land*)
- B. The different kinds of plains
  1. (*forest land*)
  2. (*grassland*)
  3. (*farm land*)
  4. (*deserts*)
- C. What makes some plains good farm land
  1. (*good soil*)
  2. (*plenty of rain*)
  3. (*warm weather*)
- D. Why some plains are deserts
  1. (*little or no rain*)

Have the pupils review the titles of the stories in the unit; then using the information they can remember from the stories and their own experiences, let them suggest ideas to fill in the blanks.

**Purpose for silent reading, page 112**

*Let's read page 112 to see whether our answers to the outline are correct.*

**Enriching concepts through discussion**

Have the parts pertaining to each heading in the outline read orally and explained further if necessary. Stress the idea that plains may be gently rolling land and are not flat like the top of a table. Let a child sketch on the board a plain, a hill, and a mountain. Compare these types of land in three respects: (1) the ease with which people can travel over them, (2) their usefulness to people, and (3) the number of people you might see on each. Find pictures in the book to illustrate the various types of plains.

NOTE: In bright groups, the meaning of a tornado may be taught in connection with the last paragraph on page 112.

**Excursions for children**

1. Observe desert land or parched land where there has been no rain in a long time.
2. Visit sand dunes to see how the wind has piled up the sand.
3. Observe cactus plants in a florist shop, in bloom if possible.
4. Visit a near-by river bank to observe the vegetation along its banks. Compare it with that of the surrounding country.
5. Observe a pond or gully which is dry.
6. Compare the roots of plants such as dandelions growing in well-watered areas with the roots of desert plants.
7. Experiment with two potted plants that are much alike. Water one regularly; do not water the other. Observe results.
8. Observe the houses of underground animals.

**SUGGESTED TESTS for pages 73-112****The corn farm stories****A. How the farmer grows corn**

Arrange the following kinds of work in their proper order:

Seeding

Plowing

Picking the ears

Weeding

Harrowing

Cutting the corn for silage

Husking the ears

## B. Things needed to grow corn

Select the proper word and place it in the blank space.

nights

level

rain

soil

1. (*Level*) land

3. Warm days and (*nights*)

2. Rich (*soil*)

4. Plenty of (*rain*)

## C. Things we get from farm animals

After the name of each kind of animal, copy the word which tells what we get from that animal.

milk

beef

pork

1. Cattle (*beef*)

2. Hogs (*pork*)

3. Dairy cows (*milk*)

## The desert stories

1. A desert is (*dry*, wet) land.
2. (*Few*, many) people live on the desert.
3. The nights in the deserts of our country are (warm, *cool*).
4. Plants in the desert have (*long*, short) roots.
5. (Maple, *Joshua*) trees grow in the desert.
6. It (never, *sometimes*) rains in the deserts of our country.
7. Desert flowers bloom for a (*short*, long) time.
8. All deserts are (alike, *not alike*).
9. Plants (will, *will not*) grow well in a dry lake.
10. The thorny bush which gives food and drink to many desert animals is called a (*cactus*, reed).
11. List the names of the following desert animals on the board. Read the descriptions to the pupils. They should copy the name of the animal described.
 

A. horned toad	has a spotted back which looks like the ground.
B. jack rabbit	likes the juice of the cactus, has long ears, and leaps from place to place.
C. lizard	has four short legs and a long tail, and runs very fast.
D. coyote	makes a sound like a baby crying, and catches smaller animals for its food.
12. If enough (*water*) can be carried to desert land, people can make farms there.

## Fun on the Lake, pages 113-136

### Suggested Time Allotment

Page		No. Weeks
115	PLAYING AT THE LAKE }	1
119	GOING BOATING }	
124	WALKING AROUND THE LAKES	1
128	WINTER AT THE LAKE }	1
135	WHAT IS A LAKE? }	
Total for the unit		3

### PLAYING AT THE LAKE, pages 114-117

#### Readiness vocabulary

vacation	pine needles	shore	float
lake	swimming	rubber float	wading
	diving	bathhouse	

#### Relating the story to the child's experience

Ask the children whether they can swim or whether they would like to learn how. Ask also whether they ever went wading. Write the words *swimming* and *wading* on the board and have someone explain them. Have the pupils tell other ways they have had fun in the water. Introduce the words *diving* and *floating*. Ask where the children usually go when they swim or wade. Tell them that the next story is about two boys, William and Tom, who spend their vacation at a lake. Write *lake* on the board. Then direct the children to the picture on page 114.

#### Learning geography from pictures, pages 114, 116

Picture, page 114. *Here are William and Tom beside the lake. William is wearing a cap.*

1. What are the boys doing? Did you ever throw stones into a lake? Is it fun? Can you see where the stone hit the water?
2. Where are Tom and William standing? Run your finger along the place where the water meets the land. Do you know what the edge of the lake is called? When you read the story you will find out.
3. See the reflection of the trees in the lake. What does this tell you about the water?
4. Is the water deeper where the stone hit or at the edge of the lake? Why do you think so?
5. How many different kinds of trees do you see in this picture? What time of year do you think it is? How can you tell?
6. Does this look like a nice spot to spend a vacation? Why?

**Picture, page 116.** *Who can tell what is going on in this picture? As you tell it, try to name all the things you see.* Give the children time to study the picture and then call on various ones to tell what they have seen. See that the following points are included:

1. Two children in the foreground are wading in the shallow water near the edge, or shore, of the lake.
2. The boy is diving off a board attached to a raft in the deeper part of the lake.
3. One of the children is floating on a rubber float.
4. The water close to the opposite shore is also shallow.
5. A forest grows on the other side of the lake.

### **Purpose for silent reading, pages 115-117**

*As you read the story, see how many different kinds of fun you could have at a lake in the summertime. In this first story you should be able to find six different ways to have fun at a lake.* The children may be asked to list these on paper after they finish the reading.

### **Enriching concepts through discussion**

After the silent reading, ask the children to name the different kinds of fun they read about. Bring out the following points:

- A. Throwing stones into the water
  1. What kind of noise did the stone make when it hit the water?
  2. What did the stone do to the water?
  3. Where did the stone go?



- B. Walking beside the lake
  1. In what kind of place did the boys take their walk?
  2. Why was it so pleasant walking here?
- C. Swimming
  1. Where did the boys meet their friends?
  2. Which boy knew how to swim? Let someone pantomime the swimming action.
- D. Diving
  1. What were some of their friends doing?
  2. Do you know how to dive?
  3. What must you do to dive into the water? Have a pupil pantomime the action.
- E. Wading
  1. What were the other children doing?
  2. In what part of the lake were they wading?
  3. Did you find out what the edge of the lake is called?
  4. Where is the far shore in the picture on page 116?
  5. How close to the shore on this side of the lake are the children who are wading?
- F. Floating
  1. How did Tom float?
  2. Did you ever try to float? Why must you lie flat on your back?
  3. What is a bathhouse?

### Independent activities

Each pupil may choose one of the six topics listed above and write a short paragraph about children enjoying that activity. A crayon drawing may be made to illustrate the paragraph. Before pupils begin writing, they may ask the spelling of any words they may need but do not know how to spell.

### GOING BOATING, pages 118-123

#### Readiness vocabulary

boating	rowboat	sails
canoe	fishing	cabin
paddle	fish	campfire
oars	line ( <i>for fishing</i> )	clean ( <i>a fish</i> )
	sailboat	

### Relating the story to the child's experience

Recall from the previous story the various kinds of fun the children had playing in the lake. Tell the children that the next story will show how much fun people can have going out on the lake in boats. In an informal discussion let the children tell about the various kinds of boats they know and if they had a choice which kind they would select for their vacation fun.

### Learning geography from pictures, pages 118, 120-122

**Picture, page 118. *What kind of boat is this?*** Write *canoe* on the board and teach the children to pronounce it correctly.

1. How can you tell a canoe from other boats?
2. How are the children moving it? (Write *paddle* on the board.) Compare this picture with the one on page 113.
3. How are the children dressed? Do you think this is a good way for them to be dressed? Why?
4. Can you find the shoreline in this picture?
5. What kind of trees are growing on the shore?
6. Would you say the water in the lake is rough or smooth? Does this make it hard or easy to paddle the canoe?

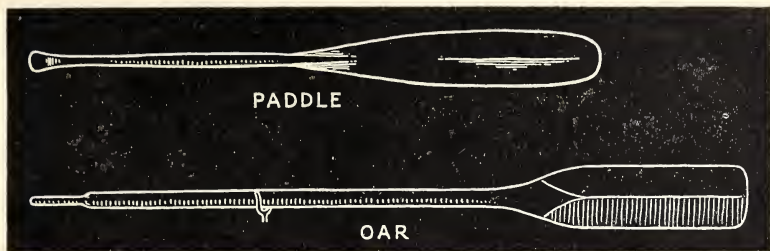
**Picture, page 120. *Here are Tom's father and a friend sitting in a boat.***

1. What kind of boat is this?
2. How is it different from a canoe? Which do you think would be safer to ride in, a rowboat or a canoe? Why?
3. How do the men make this boat move through the water? (Write *oars* on the board.)
4. Compare this picture with the one on page 114. Does the water look the same or different? Compare the two shorelines. How are they different?

**Picture, page 121. *What is this kind of boat called?*** Write *sailboat* on the board.

1. Do you know what makes the sailboat move?
2. Suppose the people do not want to go the way the wind is blowing. Do you know how they can make the boat go where they want to go? The story will explain what they do.

**Picture, page 122. *This is Tom's family. His sister, Dorothy, is holding her hands toward the fire.***



1. Where do you think these people are?
2. Do you know what kind of fire this is? (Write *campfire* on the board.) Why did Tom's family build a fire? Where did they build it? Why do you suppose they put big rocks around it?
3. How can you tell it is nighttime?

### Purpose for silent reading, pages 119-123

*Read the story silently and when you finish take your paper and pencil and see whether you can fill in these two charts correctly. Have these charts placed on the board:*

Name of boat

1. (*canoe*)
2. (*rowboat*)
3. (*sailboat*)

Moved by using

1. (*paddles*)
2. (*oars*)
3. (*sails*)

Three ways of enjoying a vacation at a lake

1. (*swimming*)
2. (*boating*)
3. (*fishing*)

### Enriching concepts through discussion

Following the silent reading have a child read from the outline the names of the boats and how they are moved. Then ask these questions about each type of boat, using the pictures to illustrate each type:

A. The canoe

1. Why does a canoe upset so easily?
2. Did you ever try to paddle a canoe? How is it done? Do you think canoeing would be easy to learn?

B. The rowboat

1. How are oars different from paddles?

2. Do any of you know how to row a boat? (Have someone pantomime the action of rowing.)
3. Why is a rowboat safer than a canoe?
4. Why do the men use a rowboat for fishing? (Write *fishing* on the board.)
5. Did you ever go fishing? What things do you need to take with you? Did you ever catch a fish? How do you know when you have a fish on your line? Is it fun? (Have someone pantomime the action of fishing.) Did you ever cook and eat a fish soon after it was caught? Was it good?

C. The sailboat

1. Find the sentence which tells what makes this kind of boat move. (Have it read orally.)
2. Read the sentence which tells how people can make a sailboat move the way they want it to go.
3. Have you ever had a ride in a sailboat? Do you think it is hard to sail a boat? Is it easier or harder than rowing a boat? Why?

Continue the discussion as follows:

1. Can you think of a name that you could use for all three of the boats? (If necessary ask what they are all used for. Elicit the words *pleasure boat*.)
2. What was the first word you put in the second chart? (Elicit *swimming*.)
3. What are two other ways of enjoying a vacation at a lake which are mentioned in the story? (*Fishing; having a campfire supper*.)
4. Where do Dorothy and Tom live while they vacation at the lake? (If possible, show some pictures of log cabins in the woods.)
5. Did you ever eat a campfire supper? Why is it fun?
6. Why are the children hungry?
7. Why does the fire feel good to Dorothy?

**Independent activities**

1. Write the name of each kind of boat shown in the pictures on pages 113, 118, 120, and 121.
2. Make a toy sailboat.
3. Write a definition of an oar; a paddle.
4. Using all the books available, find other pictures of the boats named in this story. Book marks may be inserted. Later in the

discussion period, each pupil may show one of the pictures he found and state one fact about it.

### WALKING AROUND THE LAKES, pages 124-127

#### Readiness vocabulary

hike

pond

island

#### Relating the story to the child's experience

Direct attention to the picture on page 125. *Here are May and Jim. They are having a fine time at the lake. Do you know what they have just done? They have hiked around the shore of that whole lake on a path that follows the shoreline. Do you think you could do that? What do you think you would see on the way?* If any pupil ever took a long hike, let him tell about it.

#### Purpose for silent reading, pages 124-126

*While May and Jim were hiking they saw something that made them hurry home to talk to their mother. Let's read the story to find out what they saw and why they are looking so happy in the picture.*

#### Enriching concepts through discussion

Lead the children to discuss the sequence of events described in the first five paragraphs of the story.

#### Learning geography from a pictorial diagram, page 127

*Look again at the picture on page 97 which shows Mr. Reed's farm. Remember that in this picture you are looking down on the farm, as if you were high above it.*

*Here is another picture like the one on page 97. This picture shows how the lakes look from far above them. Notice the red dotted line in the picture. This marks the path Jim and May followed on their hike.*

Help the children to develop spatial orientation by asking these questions:

1. From where are we looking at this drawing?
2. Why are we able to see so much land and water in one picture?

These questions will enable the pupils to review their ability to identify objects and places on the diagram:

1. How many lakes do you see? What color are they?
2. Where are the forests?
3. Run your finger along the shoreline of the big lake.
4. Of which lake do we see only a part? Why?
5. Which lake did the children walk around in a few minutes? What is this kind of lake called? (Write *pond* on the board.) How many ponds do you see? Where did you read before of a pond?
6. Find the place where the children started on their hike.
7. Where did they stop to look across the biggest lake and decide that they couldn't walk around it?
8. What did the children see that gave them an idea about some fun for the next day? (Write *island* on the board and explain the pronunciation.)
9. Find the sentence on page 126 which tells what an island is. Have it read orally. Find the island. In which lake is it? How do you know this land is an island?
10. Where were the children standing when they saw the island?

To help the children locate things in relationship to one another, present these problems:

1. If the children go on the picnic, how will they get to the island from the house?
2. Suppose some day the children decide to take a hike through the forest from the big lake to the biggest lake, how might they go?

To complete the study of the diagram, help the pupils compare distances and visualize the route followed by the children.

1. Would this hike through the forest be longer or shorter than hiking around the big lake?
2. Have the pupils trace the route on their diagrams while a child retells the story. Emphasize that pupils should not mark in their books or soil the pages.

### Independent activities

The pupils may draw a simple floor plan of the classroom showing the location of the teachers' desk and of their own desk. With crayon each pupil may show by a dotted line and arrows the route he follows when he enters and leaves the room.

NOTE: Slow classes may copy a plan drawn on the board by the teacher.



## WINTER AT THE LAKE, pages 128-134

## Readiness vocabulary

sliding

skating

firewood

slippery

iceboat

sausage

## Relating the story to the child's experience

Recall the different kinds of fun the children had at the lakes in the summertime. Have the pupils review the pictures included between pages 113 and 125. Then present the idea that these particular lakes are located in a place which has four seasons. Have a child recall the four seasons. List them on the board. Then ask the children what they think happens at the lake when summer comes to an end and fall and winter begin. Ask them what kind of fun they think they could have at the lakes in the wintertime.

## Learning geography from pictures, pages 129-131

Picture, page 129. *This is one of the same lakes we saw in the summertime pictures. See how different it looks in winter. Sam and his sister Elizabeth are dressed in their snowsuits.*

1. What are the children doing? (Write *sliding* on the board.) What makes the sled slide well on the snow?
2. Which way do you think the children are sliding? Where did they start? Where do you think the sled will stop? What kind of land is this?
3. Do you see the house where the children are probably staying while on their holiday?

Picture, page 130. *What are Sam and Elizabeth doing in this picture?*

1. Why don't they slide on their sled instead of walking?
2. Do you think they are walking back up the hill on the same path on which they came down? Why not?
3. Notice the leaves on the bush on the left. What color are they? Do you know why they are this color?

Picture, page 131. *Do you see Sam and Elizabeth in this picture? Where are they now?*

1. What are these people doing? (Write *skating* on the board.)
2. Do you think a lake is a good place to skate? Why? Do you think it is dangerous or safe? Why?

3. Do you know how to ice skate? What games could you play on ice skates?
4. Is skating healthy fun? Why?
5. Is the sun shining? How can you tell?

### **Purpose for silent reading, pages 128-131**

*Let's read the first part of the story called "Winter at the Lake" to see whether what we said about the pictures was right and whether you'd enjoy a winter holiday at a lake.*

### **Enriching concepts through discussion**

Begin the discussion by pointing out the following general observations about winter at the lake. Guide the pupils to think of these points themselves.

1. Most people leave the lake and go into town.
2. Many cabins are closed up for the winter, but people come back for short holidays or weekends.
3. The leaves fall from many of the trees, only the evergreens remaining green. In the fall before the leaves drop, they turn red, yellow, or brown.
4. Chilly winds begin to blow, and although the sun often shines, it is not very warm.
5. Snow falls and the water in the lake may turn to ice.

Continue by having the children locate the part of the story which answers the following questions. Call on one child to read the answer orally. Ask the pupils to check to see that the reader begins and ends in the proper place.

1. How do the trees around the lake look in winter?
2. What is the first kind of winter fun mentioned in the story?
3. Which way is the sled going when it moves fast?
4. Why does the sled go so fast?
5. How far onto the lake does the sled go?
6. Why does Sam have trouble standing up?
7. What is the easiest way up the hill?
8. Why do the children have to be good skaters?
9. Why is the *Keep off* sign put on one part of the lake?

### **Purpose for silent reading, pages 131-134**

Recall the kinds of boats used on the lake during the summertime.

*Would you like to go boating in the wintertime? Let's read the last part of the story to find out what kind of a boat can be used at the lake in winter. We will also learn about another way to enjoy the lake in the winter.*

### Learning geography from pictures, pages 132, 133

Picture, page 132. *Here is a picture of the iceboat two of the older boys had at the lake.*

1. How is an iceboat like a sailboat? How is it different?
2. How do the boys make the boat move? Why do they lie down?
3. Why do you suppose a boat goes more rapidly on the ice than it does on the water?
4. Would you like to ride on an iceboat?

Picture, page 133. *This picture shows the big fire that the children and their friends built at the lake.*

1. Why did Sam and Elizabeth and their friends build this fire? Notice where they built it. Will it melt the ice?
2. Where did they get the firewood?
3. Do you think you'd enjoy eating here with Sam and Elizabeth and their friends?
4. Look at the picture on page 122. What is the difference between these two pictures?
5. Compare the meal Tom and Dorothy had over their fire with that which Sam and Elizabeth had.

### Learning geography from pictures

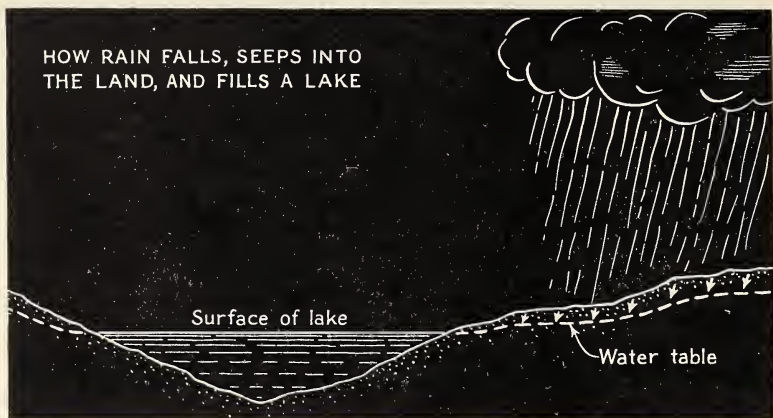
Pictures, page 134, 136. *On these two pages are two different pictures of lakes. Look carefully at both pictures and tell how they are different.* In the discussion that follows be sure that all of these things are mentioned:

**Page 134:** Season, ice, snow on the ice, the evergreen trees, the shoreline, children walking on the ice, mountains.

**Page 136:** Season; blue, clear, quiet water; reflection of the trees; the evergreen trees; the flowers and green bushes; mountains.

### Enriching concepts through discussion

*Would you rather go to the lake for a holiday in winter or in summer? Why?* Encourage the children to give full descriptions of the activities they would prefer.



### UNIT SUMMARY, pages 135-136

#### Reviewing unit content

Have the children review the most important facts learned from this unit. The following concepts should be included:

1. Life at a lake is different in winter and summer.
2. The water in a lake is sometimes rough and sometimes smooth; it is often deep in the middle and shallow near the shore.
3. Some lakes are small and some are large.
4. Lakes often freeze over in the winter.
5. Lakes are centers of recreation in both summer and winter.

#### Purpose for silent reading, pages 135-136

*The last story in this unit about lakes will give us some very interesting and important information. It will tell us the words grown-ups use when they describe a lake. It will tell us where the water in the lake comes from and where it goes. Did you ever hear of men making a lake? This story will tell you how it is done. It will also tell you about land that has water all around it. What is it called?*

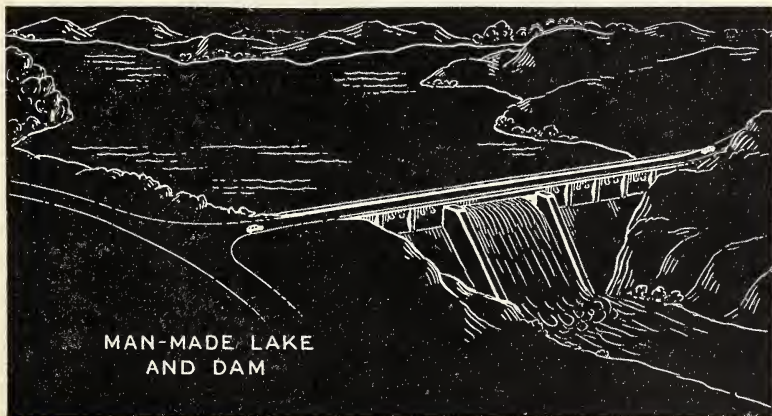
#### Enriching concepts through discussion

Following the silent reading, ask these questions, having the children read the answers orally. After each answer is read the teacher should expand the ideas presented with further explanation, using blackboard sketches and pictures to help clarify the concepts.

1. How are lakes formed? (Explain the *hollow* by drawing a sketch on the board.) How are lakes used?
2. What is the difference between a pond and a lake? Draw two sketches, asking the children to tell you where to write the words *pond* and *lake*. Also refer to the pictorial diagram on page 127.
3. Where does the water in the lake come from? Over one of the lake sketches on the board, show drops of rain falling on the land. Explain how some of the rain soaks into the ground and seeps toward lower places, where it comes to the surface in permanent streams and lakes.
4. The water in most lakes keeps flowing out of the hollow. Where does it go? (Draw sketch to explain.)
5. How can men make a lake? (Teach the word *dam*.)
6. What is an island? (Have pupils draw various sized islands.)

### Independent activities

1. Make a list of all the varieties of fun which one can enjoy at a lake. You might divide your list into two parts, "Summer Fun at the Lake" and "Winter Fun at the Lake."
2. Using pictures cut from old magazines, make a scrapbook using the titles suggested in the above activity.
3. Make a drawing something like the one on page 127. (Help the pupils decide on a hike they would like to take and see whether they can show in their drawing where they want to go.)
4. Draw a big blue lake. Put some different-sized islands in it.





**Excursions for children**

1. Visit a near-by lake and note whether it is a small or large lake, a natural or man-made lake. Notice the surrounding land and define it as mountains, hills, or plains.
2. After a heavy rain, observe how the small hollow places in or near the schoolyard are filled with water.
3. Visit a lake resort area and take part in the winter or summer recreational activities.
4. Take a walk around a small island, or a ride around a large one, and note the shoreline of the lake.

**SUGGESTED TESTS for pages 113-136****Test on geographic vocabulary**

1. When water gathers in a big hollow a (*lake*) is formed.
2. The land along the edge of a lake is called the (*shore*).
3. A (*pond*) is smaller than a lake.
4. A piece of land with water all around it is called an (*island*).
5. The water from a lake often flows into a (*stream*).

**Test on geographic ideas**

6. Some lakes are (*made*) by men.
7. People go to lakes in summer because it is (*cool*) on the shore.
8. Five kinds of summer fun to be enjoyed at a lake are:  
(*walking, wading, swimming, boating, fishing*).
9. Three kinds of winter fun at a lake are:  
(*sliding, skating, iceboating*).
10. Three kinds of boats used for enjoyment on the lake in summer are: (*canoe, rowboat, sailboat*).

If necessary, have the following words placed on the board to help with the spelling:

island

sliding

wading

lake

sailboat

rowboat

pond

swimming

shore

cool

skating

canoe

hot

made

boating

river

floating

iceboating

walking

stream

fishing



## River Stories, pages 137-154

### Suggested Time Allotment

Page		No. Weeks
139	CUTTING TREES INTO LOGS	1
144	FLOATING THE LOGS DOWN THE RIVER	1
150	AT THE MILL	1
154	WHAT IS A RIVER?	
Total for the unit		3

### Geographic Concepts to Be Developed

1. Rivers begin as small streams.
2. Little streams come together and form big streams.
3. Rivers always run downhill.
4. Rivers cannot flow uphill.
5. The water in a river may move fast or slowly.
6. Some rivers flow into the sea.
7. Some rivers freeze over during the winter.
8. Rivers are useful to man for floating logs down to a mill.
9. Logs are taken to a mill to be made into boards.
10. Moving water can turn wheels.
11. Logs may be ground into pulp, which is used to make paper.
12. Some men grow trees so that they will have logs to sell.

### Learning geography from pictures

Picture, page 137. *This picture shows the kind of place where a river sometimes has its beginning.* Have the title of the unit read.

1. Do you think this is a beautiful spot? What makes it beautiful?
2. Where are these women standing? What are they doing?
3. What kind of land do you see? Where do you think this water comes from?
4. Is the water moving? How can you tell?

5. In this picture we see only a narrow stream running over the rocks, but some streams like this one flow for miles and miles, getting wider and wider and deeper and deeper until at last they flow into the big sea. Do you know how rivers get larger?

*These women are using this stream for pleasure. The next group of stories will tell us about some very important ways rivers are used.*

### CUTTING TREES INTO LOGS, pages 138-143

#### Readiness vocabulary

hatchet	lumber	timber	river
logs	bark	tree trunk	
mill	ax	saw (for cutting)	

#### Relating the story to the child's experience

*Has anyone ever walked through a large forest?* Let someone describe his experience. *Has anyone ever tried to put his two arms around a tree trunk and found that his hands would not meet? Would such a large tree be useful to us? For what?*

*If while walking through a forest you should suddenly hear someone shout "Timber!" what would you do?* Write *timber* on the board and explain what it means. Tell the children that the story they will read next will tell them how big trees are cut down and how men make a tree fall in the direction they want it to fall.

#### Learning geography from pictures, pages 138, 141-143

**Picture, page 138.** *This man's name is Ben Smith. He owns this forest.*

1. What do you think he is doing here?
2. What kind of a tool is he using? (Write *hatchet* on the board and help the pupils pronounce it.)
3. For what do you think this tree will be used? Why?

**Picture, page 141.** *Here are two of Ben Smith's helpers.*

1. What are they doing?
2. What kind of a tool are they using? Are they both holding the saw? Why? In the next picture you will be able to see the saw more clearly.
3. Would you call this tree large or small?
4. Why do they cut the tree trunk so close to the ground?

5. Which way do you think the tree will fall? These men know and the story will tell you how they know.
6. Is it important to know which way the tree will fall? Why?
7. When do you think the men will shout "Timber"?

**Picture, page 142.** *In this picture you can see clearly the saw the men are using. How is it different from other saws you have seen?*

1. See the teeth in the saw. How long do you think the saw is?
2. What have the men done to this tree since it fell? (Call attention to the ax in the picture.) Can you see where the branches have been chopped off?
3. What do you suppose the men are going to do to the tree? Why will they saw it into logs?
4. What can you tell about the forest by looking at this picture?

**Picture, page 143.** *See the horses pulling the logs.*

1. Do you see where the logs have been cut?
2. Where do you think the horses are taking the logs?
3. What has been laid on the ground for the horses to walk on? Why do you suppose this was done?
4. What kind of horses are needed for this work? Why?
5. On what are the logs resting?
6. See the tall grass in the picture. What does this tell you about the land here?

### **Purpose for silent reading, pages 139-143**

*Let's read the story to find out seven things done to trees from the time they are chosen and marked for cutting to the time when the logs are piled on the river bank.* Write the title of the story on the board and under it list numbers 1 to 7, leaving blank spaces after each to be filled in during the discussion.

### **Enriching concepts through discussion**

Ask various children to describe the steps in the process of felling trees and cutting them into logs. After each step is described, the children should help to condense the information into a few words which can be written on the board by the teacher. Each step should be explained and enriched by further information as follows:

#### **A. Picking out and marking the trees to be cut**

Point out that this is done by the owner usually in winter or

spring so that the logs may be floated down the river in the spring. Tell the pupils that a mill is a building where logs are sawed into lumber by machines. In a mill, machines may also grind up wood to make paper. The owner of the forest makes money by selling the logs from large trees. There will be more space in the forest for younger trees to grow, after the large trees have been cut down.

B. Chopping the tree to make it fall in a certain way

Explain that trees are made to fall in a certain direction in order to save the small trees near by from being broken by the falling trees. It is important also from the point of view of safety.

C. Sawing the tree until it breaks away and falls

Explain the type of saw used and the value of sawing close to the ground even though it is more difficult to do so. Refer to the word *timber*. Note that the tree does not need to be sawed all the way through. Recall the stump in the illustration on page 2. Help the children visualize the spectacle of a great tree crashing to the ground. Lead them to appreciate the length of time it took the tree to grow to such a size and to realize the extent of its usefulness to man.

D. Measuring the tree trunk

Discuss why the owner measures it, bringing out the relation between the size of the tree and the use to which it will be put.

E. Sawing the tree trunk into logs

Call attention to the type of saw used, the amount of muscle power needed to cut through the log, and the length of time it takes to do the job. Point out why the trunk must be sawed.

F. Dragging the logs to the river

Draw attention again to the illustration on page 143. Note the size of the logs, the necessity for a man-made path through the low land along the river bank.

G. Piling up the logs on the river bank

This step may be used to lead into the next story.

### Independent activities

Draw and label each kind of tool about which you have read in this book. (*ax, shovel, plow, rake, corn knife, hatchet, saw, pole for moving logs.*)

## FLOATING THE LOGS DOWN THE RIVER, pages 144-149

## Readiness vocabulary

poles

hook

guide

downstream

## Relating the story to the child's experience

*Have any of you ever floated a stick or a toy boat in a stream? What makes the stick move? Did the stick always go straight down the middle of the stream? What happened to it?*

*At the end of the last story we left the logs piled up at the river bank. What do you think Mr. Smith will do with them? Do you think the river might help him? How? Let's look at the pictures in this story to see what happens next.*

## Learning geography from pictures, page 145-149

Picture, page 145. *What is happening in this picture?*

1. Would you like to help roll a big log into the water? Why do you think it made such a big splash?
2. How many logs do you see in the water? What do you think will happen to the log now that it is in the water?
3. Why do you think the men are rolling the logs into the river?

Picture, page 146. *From what you see here do you think the men cut down a large number of trees or only a few?*

1. What do these men have in their hands? How are these poles different from other poles?
2. Notice the man standing on two logs. Could you do that?
3. What do you suppose these men are doing?
4. Do you think there are still plenty of trees in the forest? What makes you think so?

Picture, page 147. *Here you see the men keeping the logs moving straight.*

1. What are they doing with their poles? Why is the hook on the pole necessary?
2. Would this be an easy job or would the men have to know exactly how it is done?
3. What has happened to the bark on some of the logs?
4. Do the logs move along by themselves? Why?
5. Which way do you think the logs are being moved? (At this point

explain that water always flows down. Recall how pupils have seen rain water running down a hill or how water collects in low places. Point out that rivers always flow toward lower land and that we speak of this as *downstream*. Write this word on the board and teach the pupils to pronounce it. See whether anyone can suggest the word for the opposite direction on the river.)

**Picture, page 148. *Something has happened here.***

1. Do you know what has happened? What do you think caused the logs to pile up? (Teach the words *log jam*.)
2. How do you think the men will straighten the logs out?
3. Why do the men want the logs to keep moving downstream?

**Picture, page 149. *Here you can see how the logs have piled up.***

1. Why did the men get out of the boat?
2. Which log seems to be causing the trouble?
3. Is this hard work? Do the men have to work fast? Why?

**Purpose for silent reading, pages 144-149**

*Let's read the story to find out how the men use their long poles, how they are able to stand on the logs even while the logs are turning in the water, and how a big log jam is straightened out. When you have read the story once, read it again so you will be able to talk about what you have read.* Have the following outline on the board:

- A. Kind of boat used
- B. What the poles are used for
- C. How the men stand on the floating logs
- D. Which way the logs move
- E. Why the logs keep moving
- F. The log jam
  1. Why it happened
  2. How it was straightened out
- G. Where the logs are being taken

**Enriching concepts through discussion**

Following the study reading, call on various pupils to tell what they have found out about each topic in the outline. The important facts to stress are:

1. Rivers are used to float logs to the mill.
2. The logs are floated downstream.



Ask the pupils to tell any other way of moving logs from a forest to a mill which they may know. They may mention such means as truck, railroad, or boat.

### AT THE MILL, pages 150-153

#### Readiness vocabulary

mill wheel

wood pulp

boards

flatcar

#### Relating the story to the child's experience

Remind the children of the piles of new lumber they may have seen where a new building was being built. Let them compare the lumber to the rough logs seen in the illustrations. If anyone has visited a saw-mill let him tell about his experience. Ask whether anyone has seen a flatcar loaded with lumber. If so, ask where the children think the lumber was coming from and where it was being taken.

#### Purpose for silent reading, pages 150-153

Show the children a piece of paper and tell them that the next story will tell not only how lumber is made from rough logs but also how this paper was made from the inside of a log.

#### Learning geography from pictures

**Picture, page 151. *Here is a part of the inside of Mr. Blake's mill.***

1. What is being done to this log?
2. Where is the saw? Which way is it moving? Do you know what makes it move?
3. What is Mr. Blake's workman doing? Does his work look as hard as the work shown in the picture on page 142? Why not?
4. Do you think there are other workmen in this mill? What else will they need to do when the log is cut into boards?
5. Do you suppose all the logs will be cut into boards? Why? (Point out that some of the logs shown in the earlier pictures are too small to make boards. Have the pupil explain what is done with these small logs. Teach the words *wood pulp*.)

#### Learning geography from a pictorial diagram, page 153

***Here we see a picture of the river down which the logs were floated to the mill. Are we looking up or down this stream? How can you tell?***

To give the pupils an opportunity to locate objects and places in the diagram, ask these questions:

1. Where is Ben's forest?
2. Where did the men pile the logs on the river bank?
3. Which way do the logs float in the river? Why?
4. Point to the place where the logs piled up in the river. Why were the logs stopped here?
5. Find a little stream which flows into the river. Do you see now why a river may get larger?
6. Find the place near the mill where the logs are kept until needed.
7. Where is the mill? Why did Mr. Blake build his mill at this spot on the river bank? (If the children cannot tell, have them reread the story to find out.)
8. Do you see the water wheel? What does it do to the saw inside the mill? Point to the waterfall. How does the waterfall help the men who work in the mill?
9. Where are the railroad tracks and the flatcars? Why are they needed near the mill?

### UNIT SUMMARY, page 154

#### Reviewing unit content

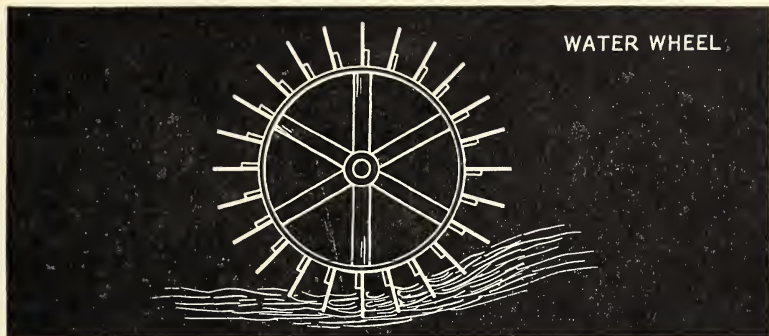
Help the children review what they have learned by reminding them of two ways rivers can be helpful to man: (1) by carrying logs downstream and (2) by moving big wheels which make machinery run in a mill. Remind them that some rivers freeze in winter, just as lakes do, and consequently cannot be used all year round.

#### Purpose for silent reading, page 154

Compare the diagram of the lakes on page 127 with that of the river on page 153. Ask how a lake is different from a river. Recall the definition of a lake as given on page 135, and then tell the children to read the story on page 154 to find out how to describe a river.

#### Extending geographic ideas learned

Provide each child with a copy of the incomplete paragraph below. Ask the children to reread the story writing the proper words in the blank spaces. When the assignment is finished check the answers by allowing a pupil to read his paragraph orally. Correct mistakes if nec-



essary. To clarify the ideas contained in the paragraph, the teacher, or perhaps a pupil, could make simple sketches on the board.

Rivers start on (*high*) land. At first they are little (*streams*). Rivers always flow (*downhill*). Rivers have little (*streams*) flowing into them. Some rivers flow into other (*rivers*). Many rivers flow into the (*sea*). Some rivers move (*fast*), while others flow (*slowly*). Some are long and others are (*short*). Some are wide and some are (*narrow*).

### Independent activities

1. Draw a series of pictures showing the chief steps in sending logs to the mill. Write a title under each picture.
2. Collect postcard views of river scenes for a bulletin board display.
3. Draw different kinds of rivers, for example: long, short, wide, narrow, winding, straight, muddy, clear.

### Excursions for children

1. Take a ride across a river on a ferryboat.
2. Take a walk along a river bank and notice the river's course and how it flows downhill. Float a stick or log in the current and watch how the water carries the stick along.
3. Observe the headwaters of a near-by stream.
4. After a heavy rainfall, find a tiny river system on bare ground in or near the schoolyard, and notice that the rivulets flow together to form one stream.
5. Observe a water wheel in action.
6. Take a walk in a wooded area where trees are being cut.
7. Visit a sawmill or a lumberyard.
8. Visit the site of a construction job where lumber is being used.

## SUGGESTED TESTS for pages 139-154

**Test on geographic ideas**

Place the following statements on the board and have the children rearrange the statements in proper sequence. They may copy only the letters which indicate the statements.

- A. Taking off the bark
  - B. Cutting trees into logs
  - C. Picking and marking trees to be cut
  - D. Piling logs on the river bank
  - E. Chopping to mark the way trees should fall
  - F. Floating logs downstream to the mill
  - G. Sawing down the tree
  - H. Dragging the logs to the river
  - I. Sawing some logs into boards and grinding some into wood pulp
- (The correct arrangement is C, E, G, B, H, D, F, A, I)

**Test on geographic vocabulary**

*Write on your paper the numbers of the words listed on the board. In the other list are the meanings of the words. Each meaning is marked with a small letter. Choose the meaning that fits each word and write its letter after the right number on your paper. You do not need to copy the words or the meaning.*

- |                |  |
|----------------|--|
| 1. hatchet     | a. thick stem of a tree                                      |
| 2. log         | b. building in which wood is ground up to make pulp          |
| 3. mill        | c. fine bits of wood soaked in water                         |
| 4. lumber      | d. a small ax with a short handle                            |
| 5. bark        | e. tool to chop timber                                       |
| 6. wood pulp   | f. the trunk of a tree after the branches have been cut away |
| 7. ax          | g. wood sawed into boards and ready to use                   |
| 8. saw         | h. outside covering of a tree                                |
| 9. river       | i. tool with a thin blade and an edge having teeth           |
| 10. tree trunk | j. stream of water   |

(The answers are: 1d, 2f, 3b, 4g, 5h, 6c, 7e, 8i, 9j, 10a.)

## Sea Stories, pages 155-196

### Suggested Time Allotment

Page		No. Weeks
157	AT THE BEACH	1
164	AT LOW TIDE	1
170	THE SEASHORE IN WINTER }	
173	FISHERMEN AT SEA	2
190	BRINGING IN THE FISH }	1
196	WHAT IS THE OCEAN? }	
<i>Total for the unit</i>		<hr/> 5

### Geographic Concepts to Be Developed

1. The ocean is an immense expanse of salt water which is deep in most places.
2. Ocean water must be colder than fresh water to freeze over.
3. The ocean makes the neighboring land cooler in summer and warmer in winter. Consequently, city people use the ocean beaches for recreation in summer.
4. The bottom of the sea is smooth even where it has mountains.
5. There are many different kinds of coasts, such as sandy beaches and rocky shores, straight coasts and crooked ones.
6. The tide comes in and goes out twice every day, and the shoreline changes.
7. Plants and animals live in the ocean. Men use some of these animals for food.

### AT THE BEACH, pages 158-163

#### Readiness vocabulary

beach	ocean	foamy	salty
seashore	waves	breaker	high tide

### Relating the story to the child's experience

Ask the pupils whether they like to play in the sand and whether they like to have lots of it so that they can dig deep. Have several children tell about things they have made in the sand, such as tunnels and towers. Then ask the pupils how they would like to spend a vacation in a place where they could have all the sand they wanted and could run for a long way on hard, clean, wet sand or walk barefoot in warm, dry sand and maybe find beautifully colored shells on the way. Ask whether anyone knows where such a spot might be found. Then tell the children that the next stories will tell them about the kinds of fun people can have along the shore of the biggest body of water in the whole world. Ask someone to name it. Write the word *ocean* on the board.

### Learning geography from pictures, pages 155, 156, 158, 159

Picture, page 155. *Can you tell from this picture what the next stories are about?* Have the title of the unit read orally.

1. What kind of boat do you think this is?
2. Where is the ship?
3. Is the ocean rough or smooth?
4. Would you like to be on this ship? Why?

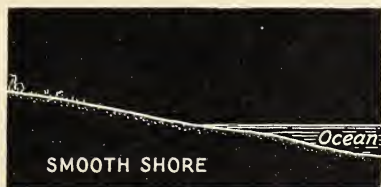
Picture, page 156. *This is how the big ocean looks from the shore. Do you remember from the stories of the lakes, what a shore is? Run your finger along the shoreline in this picture.*

1. Is it a straight shoreline? (Explain that coasts differ in different places, some being rocky, some smooth and sandy. Teach the word *seashore* so that the pupils will be able to read it later.)
2. Is this shore rocky or smooth?
3. What do you think those small white things are at the edge of the water? What are they doing? Tell the children that one of the sea stories will tell them what these sandpipers like to eat along the seashore.

Picture, page 158. *These three children are in our first story. The girl is Nancy and the two boys are her brothers, Tim and Bob.*

1. Where are the children? Do you see a small part of the sea in the background? (Tell the children that this sandy part of the seashore which is washed by the waves is called a *beach*. Write the word on the board and have the pupils pronounce it.)





2. What are the children doing to enjoy themselves?
3. Do you think it is warm or cold on this beach? Why?

**Picture, page 159. Here is another view of the same beach.**

1. What are these people doing?
2. Why do you think they put umbrellas in the sand? Notice these umbrellas. Are they the kind we use when it rains? How are they different?
3. Why do you think so many people like to spend their vacations along the seashore? The story will tell you why they come here.
4. What do the people seem to be looking at? Why do you think they like to watch the ocean?
5. Can you find the shoreline in this picture?
6. What do you think the small buildings in the background are?

**Purpose for silent reading, pages 157-159**

*Let's read the first part of the story called "At the Beach" to learn why so many people spend their vacations here.*

**Enriching concepts through discussion**

Following the silent reading, have the children locate and read orally the sentences which answer the following questions:

1. Where is Nancy spending her vacation?
2. What is a beach?

3. What is the weather like on this seashore in the summertime?
4. How large is the ocean?
5. What is the sand like near the water's edge? What is it like farther back? Where would you rather walk? Why?
6. How do Nancy and her friends have fun on an ocean beach? Would you like to do these things? What would you like best?

### Learning geography from pictures, pages 160, 161, 163

Picture, page 160. *Here is a good view of the ocean and its shore.*

1. Is the water moving or standing still? (Write *waves* on the board. Explain that the waves are higher on some days than on others.)
2. What do you think makes the water turn white and foamy near the shore? From the story you will learn that these waves are called *breakers*. (Help the children with the pronunciation.)
3. Do you think you could swim near this shore? Why not?
4. Is it possible to swim in big waves or breakers? Where could a good swimmer swim to get away from the breakers? Would the water be deep there?
5. What kind of fun are the people in the water having? Do you think you'd like to jump the breakers? What would it be like?
6. Can you find the shoreline in this picture? Is it straight or curved?
7. What part of the picture shows us that the ocean is big?

Picture, page 161. *Here we see Nancy as she steps into the water.*

1. Why is she walking so carefully? (Point out that there are many stones and sharp pieces of shell on a beach. Also show that she may be a little wary of the breaking waves, and especially conscious of the cold water, which is cooler than the air.)
2. Why are there so many stones close to the water's edge?

Picture, page 163. *Here are two girls waiting for their mothers. But in a very short time they must get off this beach. Do you see that all the other people have left the beach?*

### Purpose for silent reading, pages 159-163

*Let's read the last part of the story to see why the girls must leave so quickly.*

### Enriching concepts through discussion

Since the last part of the story gives an important description of high tide, let the children talk about what they have learned, referring to

the text only to verify questionable answers to the following questions:

1. In what way does the water in the ocean move? What does this movement make? (Waves may be compared to a field of waving grain if pupils are familiar with this sight.)
2. Are all of the ocean waves big? Where do they start to get high?
3. When the top of a wave rolls over, what happens?
4. What is a breaking wave called?
5. Where do the waves break?
6. How strong are breakers?
7. Why can't people swim among the breakers? Where do strong swimmers go to swim?
8. Why did the water seem cold to Nancy at first?
9. Why didn't Nancy like to get water in her mouth?
10. Why did the girls have to leave the beach?
11. How can the children tell when the tide is coming in? What kind of tide was this called?
12. Why does Nancy like to swim at high tide?

### **Independent activities**

Draw a movie strip showing what Nancy, Tim, and Bob do at the beach.

### **AT LOW TIDE, pages 164-169**

#### **Readiness vocabulary**

low tide  
sea shells

sand worm  
seaweed

lighthouse  
crab

#### **Relating the story to the child's experience**

Recall the meaning of high tide. Then direct attention to the title of the next story and ask the children what they think it means. Remind the children also of the animals they read about which live on the desert. Ask them whether they would like to know what kind of animals live in or near the ocean. See whether they can think why the animals that live near the ocean could not live on the desert.

#### **Purpose for silent reading, pages 164-169**

Direct the children to read the story to learn how different the beach is at low tide. Tell them the story also tells about some very

interesting things Nancy and her brothers saw on the beach during low tide which they didn't see at high tide.

### **Learning geography from pictures, pages 165-167, 169**

Direct the children to the pictures and ask them to study each one carefully with the idea of seeing how much has been told about each picture in the story. Then let various children describe what they see in each picture, encouraging them to use connected ideas.

**Picture, page 165.** *This is the same beach you saw on page 160. See how different the shoreline is at low tide than at high tide.*

1. Are the breakers high in this picture?
2. What would this beach be like to walk on?
3. Are there many people on this beach?

**Picture, page 166.** *The water at this beach is at very low tide.*

1. How far will the water probably reach at high tide?
2. How is this beach different from the one shown on page 165?
3. How does it happen that the sand piles up in hills this way?

**Picture, page 167.** *This is the lighthouse Bob discovered on the rocks.* Write *lighthouse* on the board and teach it.

1. Compare this beach with those in the last two pictures. On which beach would you rather play? Why?
2. Where is this lighthouse? What is it for? Would you like to climb up in a lighthouse?
3. See the water dashing against the rocks. What do the children find among the rocks after the tide has gone out?

**Picture, page 169.** *Here is the crab that Nancy found.* Write *crab* on the board.

1. What color is this crab?
2. How many legs does it have? Have you ever seen a crab move about? Do you think it moves fast or slowly?
3. How is this animal protected?

### **Enriching concepts through discussion**

Continue the discussion, covering the following questions:

1. How does the beach look during low tide?
2. Where do the shells come from? What are sea shells?
3. Where do sand worms live?

4. Where does seaweed grow? What color is it? How did it get on the beach?
5. What does the wind sometimes do to dry sand on the beach?
6. What did the tide wash into the little pools on the rocks?
7. What two kinds of beaches did the children see?
8. How can the children tell how far up on the beach the tide will come in?

### THE SEASHORE IN WINTER, pages 170-172

#### Readiness vocabulary

whitecaps

spray

#### Relating the story to the child's experience

Have the title of the new story read orally, and explain that some seashores stay warm the year around, while others get very cold in winter. Tell the children that on this beach the weather changes with the seasons. Ask them what they think happens at the lake, and ask whether they think people can skate on the ocean in winter. Ask whether they know of any place where it does not get cold in winter at the seashore. Then direct them to the picture on page 171.

#### Learning geography from pictures, pages 171, 172

*Picture, page 171. Here is a picture of the seashore on which Nancy and her brothers had so much fun last summer. Remember how it looked during the summer.*

1. What makes it look so different now that it is wintertime?
2. How do you think it would feel to walk along this beach in winter?
3. Is the ocean frozen over? How can you tell?
4. What are the spots of white you see on the ocean? These are called *whitecaps*. Did you see whitecaps in the summer scenes? (Explain that sometimes there are whitecaps in the summer, when the wind blows very hard. Write the word on the board.)

*Picture, page 172. Here are the same rocks on which Nancy and her brothers were climbing last summer. Refer to the picture, page 167.*

1. How are the rocks different in winter?
2. Why would they be hard to climb now?



**Purpose for silent reading, pages 170-172**

*Let's read the story to find out how many things change along the seashore in winter and whether there is anything that stays the same both summer and winter. Let's see also what causes whitecaps and why lighthouses are so necessary. See whether you would like to live near the ocean all the year round.*

**Extending geographic ideas learned**

After the first reading of the story, have the following incomplete outline placed on the board. Children may be asked to copy the outline and fill in the answers or they may reread the story studying the answers so as to be ready to take part in a discussion of the story.

- A. How the beach is different in winter
  - 1. There are no (*people*) on the beach.
  - 2. Skies are often (*gray*).
  - 3. The water is often rough because of (*the strong wind*).
  - 4. The weather is (*windy*) and (*cold*).
  - 5. Rocks are covered with (*ice*) and (*snow*).
- B. A way in which the ocean is the same the year round
  - 1. (*Tides*) come in and go out (*twice*) every day.
- C. What happens during a winter storm
  - 1. Big (*waves*) sweep up and (*break*) on the beach.
  - 2. The noise is like (*thunder*).
- D. How the ocean changes a beach
  - 1. The waves carry (*sand*) away and pile it in other (*places*).

**Enriching concepts through discussion**

Call on various children to give the information called for in the outline and have it verified by the class. After the statements under each main heading are completed, the topic should be clarified and enriched by additional information given by both children and teacher. These suggestions may be used to enrich the discussion:

- 1. Refer again to the pictures of winter sports on the lakes and clarify the meaning of fresh water as compared with salt water.
- 2. Have various children try to visualize what it would be like to watch a storm from the seashore. Let them describe in the form of a talk what they would see. Stress the power of the ocean waves, the immense expanse of water and how waves lash the shore.



3. Point out that not all seacoasts are cold in winter. Refer to the beaches in the southern part of our country.

### Independent activities

1. Make black-and-white pencil sketches of different kinds of coasts. Give each sketch a title.
2. List six things the children found at the seashore. (*shells, bugs, sand worms, seaweed, tiny sea animals, crab*)
3. Draw a night scene showing a lighthouse.
4. Write a title for each picture from page 155 to page 172.
5. Make a picture dictionary for these words: beach, ocean, wave, breaker, sea shell, sand worm, seaweed, lighthouse, crab.

### FISHERMEN AT SEA, pages 173-189

#### Readiness vocabulary

fishermen	deck	bunk	oilskins
fishhook	steering	dory	coil
bait	directions	barrel	
fishing grounds	compass	codfish	

#### Relating the story to the child's experience

Ask how many children have ever gone fishing. In an informal discussion have them help describe a fishing pole, fishhook, and bait, and tell where they have fished, what they have caught, the thrill that comes with catching a big fish, and why a fish is hard to get off the hook. Recall the story about fishing in the lakes and how good the fish tasted at the campfire. Then ask the children how they would like to go on a long fishing trip on the ocean. Have them tell how they think this kind of a trip would be different from fishing for fun in a lake. Tell them that the next two stories will be about a fishing trip. Say that the men in this story earn their living by catching a large number of fish from the sea and that they take long trips to fishing grounds far out in the ocean. Write *fishing grounds* on the board and explain its meaning. Then have the name of the new story read orally and direct attention to the illustrations.

#### Learning geography from pictures, pages 175-177

Picture, page 175. *Here are two fishermen named Joe Carter and Fred Brown. Joe has white hair. He has gone to sea many times.*

1. What are the men doing? How are they dressed?
2. What do you think is in the bundles? Why are they tagged?
3. Where is Joe standing? Fred is getting on a fishing boat. The boat has sails. Do you see the ropes in the background? These are fastened to the masts of the boat.
4. Are the men leaving during the day or at night?

**Picture, page 176. *Now the boat is out at sea, and Fred is standing on the deck.***

1. What is Fred doing here? When we read the story we shall find out where he is looking. Is it still night?
2. What kind of a wheel is this? What does it do to the boat? How do you think Fred knows which way to turn the wheel?
3. To what place is he guiding the boat?
4. Do you think this is hard work?

**Picture, page 177. *Here is Fred sound asleep. He will have to get up early in order to fish.***

1. Do you know what this kind of bed is called? (Write *bunk* on the board. Explain that bunks are arranged one above the other.)
2. Why do you suppose Fred was able to leave the steering wheel? Who do you think took his place?
3. Why does Fred sleep with his clothes on?
4. Could you sleep on a boat at sea? Does Fred look comfortable?

### **Purpose for silent reading, pages 173-177**

*If the captain of this fishing boat were to invite you to go along with these fishermen on a real fishing trip out to sea and let you sleep in one of the bunks and maybe help Fred steer the boat, do you think you would want to go? Let's read the first part of the story and see what such a trip would be like.*

### **Extending geographic ideas learned**

Place the following outline on the board. Ask the children to read over the outline carefully to see how many items they are able to tell about from their first reading of the story. Tell them to refer back to the story to find out about points they are not sure of.

- A. The fishermen
  1. Where they live
  2. For whom they work

3. Why they dress warmly
  4. What they take with them
  5. How they sleep
- B. The fishing lines
1. Why they are long
  2. What hangs from the long line
  3. What is put on the hooks
  4. Where the lines are kept until they are used
- C. The fishing boat
1. What it looks like
  2. Why it has both sails and an engine
  3. What a deck is
  4. How the boat is steered
  5. What a compass is and why it is necessary
  6. Why it is easy to get lost on the ocean

### Enriching concepts through discussion

Using the outline as a guide, call on a child to give a report on the first topic. When he has finished talking, have him ask for comments from the group. These should include additions, questions, or corrections if necessary. The teacher and children should extend the interpretation through reference to the pictures, personal experiences, and the like. Do the same with the next two topics.

### Learning geography from pictures, pages 178-182

**Picture, page 178. *Here we see the boat at the fishing grounds.***

1. What are the men doing with the small boat? How will they lower it into the sea? Do you know the name of this kind of boat? (Teach the word *dory*.)
2. How do you think they use these small boats? Do you suppose there are more than the two boats you see in the picture? We shall find out when we read the story.
3. How do you think the air feels out in the ocean in the early morning? Notice how the men are dressed. Of what kind of materials are their clothes made? Why? (Teach the word *oilskins*.)

**Picture, page 179. *Here are Joe and Fred in their dory.***

1. Why do you think two men go fishing in each small boat?
2. Who is rowing the boat? What does he row with?

3. What do you see floating on the water? The story will tell you what it is used for.
4. What is Fred doing with the fishing lines? Do you remember what these lines are like from the first part of the story? Where were the lines kept?
5. Do you see the knobs at the end of the boat? Why do you suppose they are there? The story will explain why.

**Picture, page 180. *See the fish Joe has caught.***

1. Where will he put this fish?
2. Why do you think the men must work fast?
3. These men are quite far away from the big fishing boat. Do you think there is much danger in this kind of work? Why?

**Picture, page 181. *Here is Joe smiling.***

1. What has he caught? How big do you think this fish is? How is Joe holding the fish?
2. What does Joe have around his hands? Why?
3. What is Fred doing at the barrel?
4. How do you think they knew they had caught the fish even before they saw it?

**Picture, page 182. *Do you know what Fred is doing in this picture? He is taking a hook out of the fish's mouth.***

1. Will there be any bait left on the hook? Why not?
2. What color is the fish? Do you think it is a big one?

**Purpose for silent reading, pages 177-182**

*As you read the next part of the story, see whether we were right in telling about the pictures. See whether you would like this part of a fisherman's work.*

**Enriching concepts through discussion**

Following the silent reading, use these questions in an informal discussion of the story, having the children read orally the answers containing ideas which need to be either stressed or verified.

1. When did the big fishing boat reach the fishing grounds?
2. From what kind of boats do the men fish? Why do they use small boats? How many men go fishing in each dory?
3. What supplies do the men take in each dory?

4. How are the fishing lines dropped into the sea?
5. Where do the men go when they have dropped all their lines?
6. When do they go back to pull in the lines?
7. How do they know where to find the lines?
8. Do you think the men enjoy fishing in these dories? Is it easy or hard work? Why must they work fast?
9. Why do the men throw some fish back into the water?
10. Why is the dory low in the water on the way back to the big boat? Is the boat harder or easier to row now?
11. Why is this part of the fisherman's work dangerous?

### **Purpose for silent reading, pages 183-188**

*Now that Joe and Fred have a fine boatload of fish in their dory, do you suppose their work is all finished? Let's read the rest of the story to see what the men must do when they return to the big fishing boat with a load of fish.*

### **Learning geography from pictures, pages 184, 187, 189**

Following the silent reading ask the pupils to reread pages 183-188 for the purpose of preparing a short talk on each of the three pictures. Place the following guides on the board:

**Picture, page 184. *How do the fishermen live while on a trip?***

- A. Eating on the boat
  1. Why the men are hungry
  2. Why only a few men eat at a time
  3. Getting ready for dinner
  4. Where the men eat
  5. What they eat
- B. Sleeping on the boat
  1. Why it is difficult to sleep on a boat
  2. Why the men must eat and sleep in the same room
  3. What their beds are called
  4. Why the men do not mind the rocking of the boat

**Picture, page 187. *What do the men do to the fish they catch?***

- A. Cleaning the fish
  1. Who cleans the fish
  2. Where the fish are cleaned
  3. How a fish is cleaned

Picture, page 189. *How are the fish packed to be taken back to land?*

- A. Packing the fish in ice
  1. Why the fish must be packed in ice
  2. Where they are packed
  3. How the packing is done
  4. Why the men wear gloves and oilskins

### Enriching concepts through discussion

Call on a child to give a talk on the first picture. Supplement the talk with comments from the class and additions by the teacher if necessary. Then continue with the next two illustrations in the same manner. To include the remainder of the geographic ideas in the discussion, use the following questions:

1. How are the fish in the dories unloaded?
2. What is done with the fishing lines?
3. Why do the men watch the boat at night?
4. How long does a fishing trip last?
5. Why does Joe like to look out over the ocean?

### BRINGING IN THE FISH, pages 190-195

#### Readiness vocabulary

wharf	fish company	fog	foghorn
lower ( <i>sails</i> )	net	overturned	

#### Relating the story to the child's experience

Remind the children that the fish which come to the stores dried or in cans, or fresh to the fish markets, can only be brought there because men like Fred and Joe go on fishing trips and catch the fish. Tell them that after the fish have been caught they must be prepared for sale in stores and markets. Ask them whether they have ever bought fish from a fish market or whether they have ever eaten dried fish. Tell them the next story tells about preparing fish for sale in the stores and markets.

#### Learning geography from pictures, pages 191-194

*Look at the picture on page 191 carefully to see whether you can figure out what kind of place this is, what the men are doing, and how many things you are acquainted with in the picture.* Encourage the



children to prepare thoughtful questions about things they do not understand as they study the picture. Following a few minutes of study, have the title of the story read orally and call on several children to describe what they have observed and to ask their questions. This same method may be used to study the other three pictures included in the story. The teacher may need to use some of the following questions:

**Picture, page 191. *This is the fishing boat in which Fred and Joe went fishing. Where is it now?***

1. Do you know what such a landing place is called? (Teach the word *wharf*.)
2. Do you see Joe or Fred? Where do you think they are?
3. What is the man in the green shirt doing?
4. What is the other man on the boat doing? Where is he putting the fish?
5. Who do you think the men standing on the wharf might be?

**Picture, page 192. *In this picture you can see what is happening.***

1. What kind of tool are the men using?
2. Where are they putting the fish? Why does the cart have wheels? Where do you think they will take the cart of fish?
3. What do you see in the background?

**Picture, page 193. *Here are many fish that have been cut open and spread out.***

1. What do you think this man is doing? Where is he putting the fish? Why do you think the fish are spread out like this?
2. Why is this work being done outside? Is it important that the sun be shining?
3. Do you see the building? For what do you think it is used?

**Picture, page 194. *This picture shows some of the work that goes on inside the building you saw in the last picture.***

1. What is on the table? Do these fish look like those in the last picture? How are they different?
2. What do you think the women are doing? Will people eat this fish? Where will they get it?

**Purpose for silent reading, pages 190-195**

*Let's read the story to find out the different ways fish are prepared for markets. We will learn too whether our ideas about the pictures are all correct.*

### Enriching concepts through discussion

Following the silent reading, refer to this set of questions placed on the board. Ask the children to locate the sentences which answer each question and to read these parts orally, discussing and expanding the important concepts.

1. What is the landing place called?
2. How are the fish unloaded?
3. When do the fishermen get paid for their work?
4. Where do the fishermen live?
5. Who buys the fish from the captain?
6. What is done to the fish at the fish company?
7. What is another way of catching codfish besides the way about which we have read?
8. Why is a fisherman's work dangerous?

### Extending geographic ideas learned

*What are the various types of work you have read about by which people earn their living?* List the children's answers on the board. The list should include sheep herding, work of the forest rangers, tapping sugar maples, dairy farming, work of the corn farmer, logging, and fishing. *Which of these kinds of work would you prefer to do? Why?* Conduct the discussion by having one child state his choice and his reasons for it. Next call on others to give advantages and disadvantages of this type of work until the information has been completely covered. Then call on another child to give his choice and repeat the above method. During the discussion of the disadvantages, points such as loneliness, danger, long hours of work, difficulties of the job, and the like, should be mentioned. The advantages should include enjoyment of beautiful scenery, fresh air, thrilling and interesting work, healthful work, its importance in the lives of other people.

### UNIT SUMMARY, page 196

### Reviewing unit content

Have the children recall the two principal themes included in the sea stories: (1) People use the ocean and its beaches for recreation. (2) The ocean provides us with fish which we use for food, and men make their living by catching these fish. *Remember that the ocean is the largest body of water in the world and now that you know about*

*the ocean you know about all the main kinds of water forms in the world—lakes, rivers, and ocean.* Have the pupils review briefly definitions of lake and river. *The story on page 196 contains some very interesting information about the ocean, some of which you should know from having read the other stories but some of which will be entirely new.* Ask them to read the page through silently to see what new information they can find.

### Enriching concepts through discussion

Have the whole story reread orally, stopping after each geographic thought to enrich the interpretation. Guide the discussion to include the main geographic ideas given at the beginning of the unit, referring to illustrations and drawing sketches on the board to keep the concepts vivid. During the discussion introduce the word *floor* as it is used to denote the bottom of the ocean.

### Independent activities

1. Arrange a display of sea shells.
2. Draw pictures showing the following scenes: a beach in summer; a beach in winter; a beach at high tide; a beach at low tide; a storm on the ocean; a fishing schooner and dories; a wharf.
3. Make small models of a lighthouse, a large ship, a dory.
4. Examine and study a small compass; see how it is different from a ship's compass by rereading page 176.

### Excursions for children

1. Visit a sandy beach or the seashore and notice the shoreline at low or high tide. Note the size of the waves, the season, and how the beach is being used.
2. Visit a rocky beach at low tide and look for sea animals or shells.
3. Visit a fishing wharf to see the fishing boats. Talk with the fishermen and notice their clothing and equipment.
4. Visit a fish market, a sea food restaurant, or an aquarium and try to learn which fish come from the ocean.

### SUGGESTED TESTS for pages 155-196

#### Test on geographic vocabulary

Place the following words on the board and tell the children to select and write the correct words for the blanks:

whitecaps	breaker	bait	beach
once	high tide	compass	fish company
twice	low tide	salty	fishing grounds
fog	dories	fresh	canoe
wharf	lighthouse	net	seashore

1. The sandy part of the seashore is called a (*beach*).
2. The ocean has (*salty*) water.
3. A wave which breaks in shallow water is called a (*breaker*).
4. When the sea water covers much of the beach it is (*high tide*).
5. The tide comes in and goes out (*twice*) every day.
6. The tower which has a big light to guide sailors at sea is called a (*lighthouse*).
7. The waves of foam usually seen in winter on the ocean are called (*whitecaps*).
8. The food which is put on a fish hook to catch fish is called (*bait*).
9. The part of the ocean where the fishermen do their fishing is called the (*fishing grounds*).
10. To know the directions while on the ocean the fishermen use a (*compass*).
11. The small boats kept on the deck of a large fishing boat are called (*dories*).
12. The landing place for boats is called a (*wharf*).
13. Fish are often sold to a (*fish company*).
14. Codfish may be caught by using hook and line or a (*net*).
15. The fishermen in the small rowboats may get lost on the ocean if there is a (*fog*).

### Test on geographic ideas

1. The ocean makes the weather at the seashore (*cooler*, warmer) in summer.
2. Plants and animals (*live*, do not live) in the ocean.
3. One reason the ocean does not freeze over in winter is because the water in it is (*fresh*, *salty*).
4. Shorelines (*are*, are not) changed by waves.
5. Most of the world is (*land*, *ocean*).
6. The bottom of the ocean is (*rougher*, *smoother*) than the land in our country.
7. The bottom of the deep sea is always (*quiet*, stormy).
8. Men make (*little*, *much*) use of the ocean.

# The Earth We Live On, pages 197-218

## Suggested Time Allotment

Page		No. Weeks
199	OUR EARTH, A SPHERE	1
202	MOUNTAINS, HILLS, AND PLAINS	1
207	FORESTS, FIELDS, AND DESERTS	
209	LAKES, RIVERS, AND OCEANS	
211	THE CONTINENTS	
215	QUESTIONS AND THINGS TO DO	1
<i>Total for the unit</i>		<hr/> 3

## Geographic Concepts to Be Developed

This unit is especially designed to develop spatial orientation as a preparation for future map study. It is given a place near the end of the book, after concepts of land forms, water forms, and vegetation have been developed and have provided readiness for map teaching.

### The major concepts:

1. The earth is a huge sphere, or globe, half of which is called a hemisphere.
2. No picture of the earth can show all of it at once.
3. The equator is an imaginary line which divides the earth into two equal parts; it lies exactly halfway between the poles.
4. The north pole is in the center of the northern hemisphere; the south pole is in the center of the southern hemisphere.
5. The cardinal directions are determined by the poles.
6. During the day the directions can be determined by noting the position of the sun.
7. The North Star is almost directly above the north pole and can be used to locate the north pole at night.
8. The earth is composed of land and water. The bodies of land are of different sizes and shapes, and have different kinds of plant

life. Some parts of the land are covered with mountains, other parts are hilly, and still other parts are level.

9. There is much more water on the earth than there is land. Bodies of water are also different in size and shape.
10. The large masses of land are called continents, and the large mass of water, the ocean.
11. Men use the land and water of the earth in many different ways.
12. Our country is the United States and is located on the continent of North America.

### OUR EARTH, A SPHERE, pages 199-202

#### Readiness vocabulary

sphere

north pole

equator

hemisphere

south pole

North Star

#### Relating the story to the child's experience

*Remember that the sheep herder, the forest ranger, the fire fighter, the maple-sugar farmer, the dairy farmer, the corn farmer, the fisherman, and all the other workers about whom you have read live and work on our earth. You have also been reading about different forms of land and water which are on the earth. Ask the children now what they know about the earth as a whole, what shape it is and how big it is. Bring out the fact that the earth is made up of land and water with the air all around it. How do you think a picture of the whole earth would look? How many have ever seen such a picture?*

#### Purpose for silent reading, pages 199-202

Ask the children whether they have ever seen the North Star in the sky and whether they would like to know how to find it. Tell them the next story will show them how to locate this star and why it is important that everyone know it. Tell the children also that "Our Earth, a Sphere," is not really a story but that it gives some very important and interesting information they will want to know.

#### Developing geographic concepts

In order to grasp the meaning and to interpret fully the basic geographic ideas contained in this story, each concept should be introduced and discussed, referring to the text as the need for information arises. Suggestions for the development of concepts are given below.



## THE SIZE OF THE EARTH

Recall the size of the ocean, the great mountains, and how far one can see from the top of a high mountain. Then tell the children that each of these land or water forms is small compared to the size of the whole earth and that the greatest distance we can see is but a very tiny part of the earth's surface.

Have the children locate and read orally the first paragraph in the story which tells about the size of the earth.

## THE SHAPE OF THE EARTH

Have the children recall the largest ball they have ever seen. Also show them a globe, if one is available. Tell them that the earth is a huge ball, and that the story will tell them another name given to an object of this shape. Have the second paragraph read orally.

## THE MEANING OF A HEMISPHERE

Using an apple, a ball of clay, or some other spherical object, note its similarity to the shape of the earth. Recall that the earth is called a sphere. Then cut the ball into two halves and refer the children to the third paragraph to find out what each half is called. Have the sentences read orally and write the word *hemisphere* on the board.

## THE CARDINAL DIRECTIONS

Ask the children whether they have ever been lost and whether they would like to be able to take long walks and go on trips, as their parents do, without getting lost. Tell them that the fourth paragraph will show them a way to know in what direction they are going. Have them read the paragraph silently and then orally. Tell them to practice this way of telling directions wherever they happen to be.

Help the children locate the cardinal directions in the schoolroom. Have the directions printed in large letters on separate cards. Have each of four children hold one of the signs with the printed side concealed and stand at the point of the compass designated by his sign. Then have one child call the directions, while another points toward the child holding the proper card. As the card is turned over showing the direction, the class should check to see that the child is right.

Ask the children to bring to the next class the answers to these:

1. In which direction does the front of your house face?
2. On what side of your house is your bedroom? your kitchen?

3. How many times do you change directions as you walk to school?

4. In what directions do you walk on your way home from school?

Stress the idea that the pupils should drill themselves on the cardinal directions every time they go somewhere.

#### GLOBES

Remind the children of the three pictorial diagrams on pages 97, 127, and 153. Have them turn to those pages and tell what they remember about the pictures. Help them recall particularly that these are aerial views and that each shows a portion of the land about which they had been reading. Make clear that each diagram shows a very tiny part of the earth.

Now ask the children whether they think a very large portion of the earth could be shown in this way. Direct them to the globes on pages 200 and 201. Tell them that each of these globes shows half of the earth and that as we look at them it is as if we were looking down on the land and water from a point far above the earth.

#### THE POLES AND THE EQUATOR

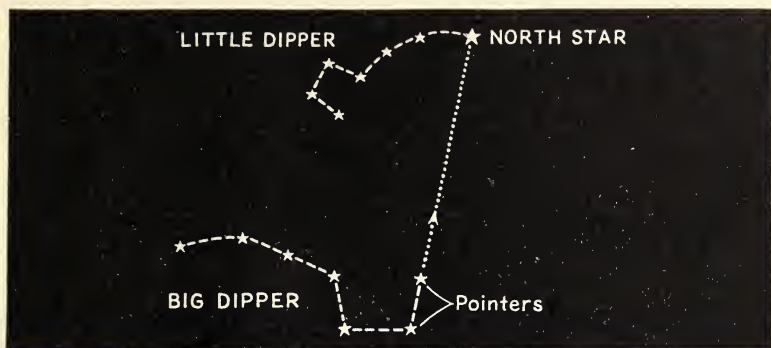
Have the children locate the poles on the hemisphere maps on pages 200 and 201. Explain *color keys* and tell how they are used. Have the pupils run their fingers around the equator. These things should be done while the part of the text concerning these points (from last paragraph on page 199 to and including first full paragraph on page 202) is read orally.

Point out that the hemispheres are not flat as they appear to be on paper, but rounded like the ball which the children saw cut in two. Help them visualize the physical world represented by the globe and to realize that people like themselves live on the land shown on the globe, in towns and on farms. Remind them that hills, mountains, lakes, rivers, and other physical features are part of this land, although they cannot be seen on the globe.

Then refer the children to the map on page viii of the preface. Tell them this is the western half of the world, or western hemisphere. Help them locate on this map the cardinal directions, the equator, and the north pole.

#### THE NORTH STAR

Ask the children whether they like to look at the stars on a clear night and whether they are familiar with the big and little dippers.



Ask them to read the second full paragraph, page 202, which explains how to tell on a clear night which way is north.

After the pupils have read the paragraph silently, draw a sketch of the two dippers on the board and let a child explain how to locate the North Star. Encourage them to ask someone at home to help them locate these stars in the sky.

Have the children turn back to the map of the northern hemisphere on page 200 and hold their fingers over the part of the map where the North Star would be located. Have them find it on page viii also.

#### THE LAND AND WATER OF THE EARTH

Before reading the last paragraph on page 202, direct the children again to the pictures on pages 200-201 and ask these questions:

1. Looking at the pictures of both halves of the world together, do you see more land or more water?
2. About how much more water would you say there is, e.g., twice as much, three times as much, or how much?
3. Which hemisphere has the most land?
4. How much more land would you say is in the northern hemisphere as compared with the southern hemisphere?

Refer the children to the last paragraph to verify their estimates.

#### Independent activities

1. Using gummed stars and blue paper the children may make the two dippers, identifying the North Star by printing in its name.
2. Direct the children to carry out the exercise (pages 215-216) under *Telling the Directions*, at the end of this unit.

## SUGGESTED TESTS for pages 199-202

## Test on geographic ideas

Place the following words on the board and let the children select and write the correct answers to the statements below:

north	west	hemisphere	north pole
south	North Star	sphere	south pole
east	equator		

1. The shape of the earth is round like a (*sphere*).
2. Half of the earth is called a (*hemisphere*).
3. The point farthest north on our earth is called the (*north pole*).
4. The point farthest south on our earth is called the (*south pole*).
5. The (*north*) pole is in an ocean.
6. The (*south*) pole is on land covered with ice and snow.
7. Around the earth exactly halfway between the poles is the (*equator*).
8. When you are facing north, (*east*) will be on your right side, (*west*) will be on your left side, and (*south*) will be behind you.
9. You can tell that you are facing north on a clear night when you face the (*North Star*).
10. The earth is very (*large, small*).
11. There is (*less, more*) water than land on the earth.
12. Most of the land of the earth is (*north, south*) of the equator.

## MOUNTAINS, HILLS, AND PLAINS, pages 203-206

## Introducing the review of land forms

Have the first sentence in the story read orally and allow the children to express their opinions on the question. During this discussion encourage the children to think about these land forms in relation to earning a living. Point out that plains are usually more useful to us than high, cold mountain peaks. Ask the children why this is true. Then ask them to read the story silently to see whether it contains other ideas they hadn't considered.

## Reviewing the geographic concepts

Following the silent reading, review each concept contained in the story by constant reference to illustrations and information previously studied. The following questions may serve as a guide:

1. What is a mountain?

If necessary, refer to the definition on page 40 and to the illustrations on pages 41 and 21.

2. How are some mountains different from others?

Compare the pictures of mountains on pages 1, 21, 41, 198, and 205. Especially discuss the picture on page 198 showing a green valley and a snow-covered peak.

3. What is a mountain range?

Refer to the picture on page 205 and have the paragraph just above the picture read orally to explain a range. Have a child make a sketch of a peak on the board and then of a range.

4. Why do so few people live in the mountains?

Have the children skim through the story to locate and read orally all the sentences which help to answer this question. Review of the illustrations on pages 6, 32, 37, and 41 will help to enrich the interpretation. Ask the children to add other reasons they may find. Refer them to the part of "Questions and Things to Do" which pertains to mountains, page 217. The items suggesting handwork to be done (Items 5 and 6) could be read now and carried out at the end of the discussion.

Ask the children to imagine they are climbing a high mountain. Tell them to go over the story to find facts which will help them describe their trip. Place the following questions on the board:

1. What would you take with you?
2. What kind of a trail might you follow?
3. About how long would it take you? (Help the children consider in answering, things which would make it a long or a short trip—steepness of trail, height of mountain, speed of ascent, etc.)
4. What would you see growing along the trail? How would the trees be different as you go higher up the mountain?
5. How would the weather change as you climb up?
6. What dangerous things might happen?
7. How would you, yourself, feel as you are climbing?

Following the preparation, call on various pupils to give their descriptions while the class looks at the picture on page 21.

Review these two important concepts:

1. How is a hill different from a mountain?

Have the pertinent paragraph (page 206, first paragraph) read orally. Recall the activities carried on in hilly lands.



2. Why do most people live on the plains?

Have the children read the last paragraph on page 206. Review the illustrations in the story called "Raising Corn," page 75.

### Extending geographic ideas learned

Have the children do Items 5 and 6 on page 217.

### FORESTS, FIELDS, AND DESERTS, pages 207-208

#### Introducing review of land usage

Have a child read orally the title of the story. Ask how many think they could identify each of these types of land. Give them time to look through the book and locate pictures illustrating each type. Call on a child to tell the page where a forest is shown. Have the other pupils turn to that page to see whether he is right. Do the same with a field and a desert.

*The next story will tell you about a kind of field that should never be used for farming. Let's read the story to find out about such fields.*

#### Reviewing geographic concepts

Using the following questions as a guide, discuss with the children the various types of vegetation found on the land.

##### A. Forest lands

1. On what kinds of land do forests grow? (Recall the three types of land forms and then have the children locate and read orally the sentences answering the question. To help the children retain this concept, recall through discussion the forest pastures, the work of the forest rangers, and the need for keeping mountain slopes forested.)
2. Refer to the logging stories along the river bank to illustrate lowland forests.
3. Review the difference between forests and groves of trees and discuss uses of each.

##### B. Fields

1. How do men make use of fields?
2. Why does the story say "dry fields should not be used for farming?" What use can be made of these dry fields?
3. Why should mountain slopes be kept covered with grass?
4. Refer the children to the illustrations of pasture lands on



pages 1, 4, 15, 17, 60, 61, and 93, and let several pupils give characteristic descriptions of each. Recall how the forest ranger must see that sheep are not allowed to graze too long in one place.

5. Refer the children to the diagram on page 97 to review the different ways to use fields planted in crops. Have them look also at the field of corn in the picture on page 77 and at the farm pictures on pages 197 and 206.

### C. Desert lands

1. How is a desert different from other lands? Why can't people live on a desert?
2. Ask the children to tell why desert land is less useful to us than forests and pasture lands.
3. Review the illustrations on pages 99, and 103, and have pupils comment particularly on the picture on page 105, pointing out the conditions that make this green spot possible.

## LAKES, RIVERS, AND OCEANS, pages 209-210

### Introducing review of water forms

If the children live near a body of water, ask them to name it and tell what they can about its size, its waters, the direction in which it flows, the name of the body of water into which it empties and some of the activities which take place along its shores. A sketch of this familiar body of water should be drawn on the board.

In case the pupils do not live near a lake, river, or the sea, call attention to the picture on page 210, and encourage them to talk about it. Then ask pupils to read the story silently to see whether any part of it describes either the body of water in the picture or a body of water like the one near which they live.

### Reviewing geographic concepts

Following the silent reading, recall the pictorial diagrams of the lakes and the river on pages 127 and 153 respectively. Have the children turn to these two pages and as a child reads orally the first paragraph on page 209, tell the pupils to locate the various sized lakes and follow the winding river. Recall how people use lakes and rivers.

Have the second paragraph read orally and discussed. Recall how the roots of trees on a slope hold back the water.

To review the ideas concerning the ocean, recall the meaning of *island* and refer the children to the maps of the hemispheres on pages 200 and 201. Ask them whether they see any islands and to find the one that looks the largest. Then tell them that these largest of all islands are *continents*. Write the word on the board and have it pronounced several times. Have the pupils notice again how much of the world is ocean. Have them find the lakes on the globe on page 200 so that they may realize the comparative size of the ocean.

The ideas concerning fresh and salt water as mentioned in the story may best be reviewed by recalling the child who went swimming in the ocean and got salt water in her mouth, the fisherman who washed the fish in salt water, and the fact that salt water must be colder to freeze than fresh water.

To review the tides (last paragraph on page 210) recall the sea animals and plants washed up on the shore during high tide, how often the tide comes in and goes out, what the waves do to the shore, etc.

During the discussion, consider the suggestions on page 218 under the title, "About the Water on the Earth."

### THE CONTINENTS, pages 211-214

#### Readiness vocabulary

North America	key (to a globe or	Asia	Australia
United States	map)	Eurasia	Atlantic Ocean
South America	Europe	Africa	Indian Ocean
Antarctica			Pacific Ocean

#### Relating the story to the child's experience

Direct the children to the hemisphere globes on pages 200 and 201. Review the location of the equator and the poles. Show the pupils the place on the globe where they live. Ask someone to tell which half of the world he lives in, the northern or the southern half. If anyone has been on any other continent help him locate it. Let the children talk about places they would like to see and locate the continents named.

#### Purpose for silent reading, pages 211-214

*The story called "The Continents" will show you another way in which the globe is often divided and will also tell you the name of each continent, or each big island in the ocean.* Ask the children to read the story silently, referring to the globes on pages 212 and 213.

### Extending geographic ideas learned

Have the children place their fingers on the north pole as shown on the globe of the western hemisphere (page 212), and on the globe of the eastern hemisphere (page 213). Do the same with the south pole and the equator. Then let a few children use the classroom globe to show how the world as shown in these pictures has been divided.

Find the land shown in the northern hemisphere (page 200) on the globes of the eastern and western hemispheres. Do the same with the southern hemisphere. Using a globe, have a child run his finger around it both ways to show the divisions into hemispheres. Have a short drill in which a child places his hand on a section of the globe while someone else tells in which hemisphere that section is.

Write the names of the continents on the board and pronounce them. Ask the children to place their fingers on each continent as it is named. Check to see that this is done correctly. Such practice may be carried out, first, with the globes on pages 212-213, second with those on pages 200-201, and third, with the globe on page viii.

Write on the board the names of the three oceans mentioned and pronounce them. Have a child read orally the last paragraph, page 214, while the children locate the oceans on their maps.

Have the children write the answers to the set of questions about the continents which are listed on page 216. Tell them to refer to the text and to the globes on pages 212 and 213 for help. Later have the correct answers read aloud, while the children point out the proper continents on the globes in their books. One child may point to the proper continents on the globe.

### Learning geography from globes

Have the children reread the part explaining the color key (pages 212-213). Then use these questions to help in the interpretation.

#### DESERTS

1. What is a desert?
2. What colors on these globes stand for deserts? Put your finger on a desert in North America; South America; Asia; Australia.
3. On what continent do you see the largest desert in the world?
4. Is there much desert land in the world?

#### FARM LAND

1. What kind of land makes a good farm?
2. What color is used on these maps to show farm land?

3. Name a continent which has no farm land at all. Can you tell from this map why Antarctica has no farming lands?
4. Which continent in the western hemisphere has the most farm land? In the eastern hemisphere?

## FOREST LAND

1. On what kind of land do forests grow?
2. What color on these globes stands for forests?
3. Put your fingers on two forests which are crossed by the equator. In which continents are these forests?
4. Put your finger on the forest which is farthest south. In which continent is it?
5. Find a forest in Europe that is far north. Through what two continents does this forest reach?

## GRASSLAND

1. How do we use land that is covered with grass?
2. What color on these globes shows such land?
3. Which continent has more grassland, North America or South America? Africa or Australia?
4. Does North America have more grassland or more farm land?

## ICE

1. In what part of the world is the land covered with ice all year?
2. What do you think you would see if you visited Antarctica?

## WATER

1. Name three great parts of the ocean.
2. What color on these maps stands for water?
3. Between what two oceans does North America lie?
4. What continents touch the Indian Ocean?
5. Which is the largest ocean in the world?
6. Find some large lakes in North America; in Eurasia.
7. What is the difference between these lakes and the ocean?

## THE PLACE WHERE THE CHILDREN LIVE

1. Put your finger on the place where you live. (Check this.)
2. What color is this place on the globe?
3. Why is it this color?

## Independent activities

1. Give each child two outline maps, one showing the eastern hemisphere, and the other the western hemisphere. The children may

write in the names of the equator, the poles, the continents, and the oceans; color the land light brown and the water blue; make a color key and write a title for each hemisphere.

2. The pupils may write the answers to the following questions: page 215: 1, 4; page 217: 1, 2, 3, 4, 6; page 218: 7, 8, 9, 10, 11, 1, 3.

### Excursions for children

1. Take walks especially planned to follow a variety of directions. Have a destination in view and let the pupils draw the route as they go along, observing landmarks and position of the sun.
2. Observe the position of the sun in the morning, at noon, and in the afternoon.
3. To get an idea of the vast size of the earth, look out over a large body of water, or for a long distance across the land from a high place or building. Notice the size of familiar objects in relation to the land and water, for example, cars, ships, people.

### SUGGESTED TESTS for pages 211-214

#### Test on geographic ideas

Place the following chart on the board. Have the pupils copy and place a check in the squares under the names of the hemispheres in which each continent is entirely or partly located.

<i>Continents</i>	<i>Hemispheres</i>		
	<i>Eastern</i>	<i>Western</i>	<i>Northern</i> <i>Southern</i>
✓ North America		(X)	(X)
South America		(X)	(X)
Europe	(X)		(X)
Asia	(X)		(X)
Africa	(X)		(X)
Australia	(X)		(X)
Antarctica	(X)	(X)	(X)

1. The ocean which lies between North America and Europe is the (*Atlantic*) Ocean.
2. The ocean which lies south of Asia is the (*Indian*) Ocean.
3. The ocean which lies between South America and Africa is the (*Atlantic*) Ocean.
4. The largest ocean of all is the (*Pacific*) Ocean.

# How We Get Food, Clothing, and Shelter, pages 219-240

## Suggested Time Allotment

Page		No. Weeks
221	WHAT EVERYBODY NEEDS	1
223	HOW WE GET OUR FOOD AND DRINK }	
228	HOW WE GET OUR CLOTHING	1
232	HOW WE BUILD OUR HOUSES	1
<i>Total for the unit</i>		<hr/> 3

## Geographic Concepts to Be Developed

This unit reviews the varied geographic concepts learned throughout the book and is designed to relate these ideas, in their proper perspective, to the lives of the children and their families.

It should be taught so as to stress, in the fullest sense, the necessity for all the varied activities carried on by men in the different parts of our country and it should show how each of these people contributes his share to obtaining our living from the earth.

Upon completion of this unit, the children should have developed not only a realization of our dependence upon the earth for the necessities of life, but also the beginnings of an understanding of the interdependence among people for these necessities.

As the pupils are led to realize the enormous amount of work involved in providing them with the necessities of life, an appreciation for the efforts of others will gradually develop.

## WHAT EVERYBODY NEEDS, pages 221-222

### Readiness vocabulary

necessity

shelter



## Relating the story to the child's experience

Have the children tell about some of the things they would like to have and then about some things they think they really need. Encourage the children to determine for themselves what things are really necessary in order to live. Then explain that the important things everyone needs are food, clothing, and shelter and that these are called *necessities*. Write the new words on the board and teach them.

## Purpose for silent reading, pages 221-222

*This new unit is about necessities, without which people could not live. Let's read the first story to learn more about what these necessities are and how people are able to get them.*

## Enriching concepts through discussion

Following the silent reading have the children locate and read orally the sentence which tells the meaning of the word *necessity*. Have them tell the three necessities and list them on the board. Ask them to give as many reasons as they can why each of these things is called a necessity. Ask how people get these necessities. Elicit the idea of *earning a living* and write the words on the board. Then ask the children to tell some of the ways their fathers earn their living. Direct them to page 222 and have them list all the ways of earning a living given there.

## Independent activities

Have the children make a list of the different kinds of work shown in the pictures of this book, and the pages on which the pictures are found. Examples are:

herding	page 2	dairying	page 66
camp-tending	page 6	farming	pages 73, 79, 82
caring for forests	page 22	logging	pages 141, 142, 143, 146
fire fighting	pages 29, 31	fishing	pages 187, 189
tapping trees	page 47		

## HOW WE GET OUR FOOD AND DRINK, pages 223-227

### Readiness vocabulary

wild	sweet corn	tame
blackberry	canneries	poultry
	field corn	

### Relating the story to the child's experience

Write the word *wild* on the board. Ask the children whether they think they have ever eaten anything that grew wild. When they have named a few things ask someone to tell what they think the word means. Then write the word *tame* on the board, and elicit its meaning. Ask for examples of food we eat which does not grow wild.

### Purpose for silent reading, pages 223-227

Have the title of the story read orally. *This story will name some of the wild plants and animals we eat and will explain why most of our food comes from tame plants and animals.* Refer them to the last two lines of the story (page 227) which state that the water we drink comes from the ocean. Recall the fact that the ocean is salt water and that the children may be living a long way from the ocean. Then ask them to read the story to find out what this statement means.

### Enriching concepts through discussion

Using ideas in these stories as a basis for discussion, recall the information and pictures concerning each idea. Also ask these questions:

1. Why is farming such important work?
2. What kinds of land are best suited to farming?
3. Men do many different kinds of work to earn their living. Do many or few kinds of workmen produce our foods?
4. Which kind of workman would you prefer to be? Why?
5. Where do we get all of our food?
6. Which kinds of food can be produced in either the hills or the mountains? Which kinds are usually produced on the plains?
7. What trees furnish us with food?
8. What food do we get from the sea?
9. A pig is often called "a machine for turning corn into pork." Can you explain what this means?
10. We do not always eat food just as it comes from the farm. What are some things that may be done to foods before we buy them?
11. Look at the picture on page 220. What is this woman doing? Is her job necessary? Why?

### Independent activities

Refer the children to "Questions and Things to Do" on page 236. Ask them to read over the questions and suggestions in the part called

*About Our Food.* Tell them to think out each answer carefully referring back to the story just read, if necessary. Answers to the following exercises should be written: 6, 10, 11, 12, and 13. All questions should be discussed if time permits.

Then refer the children to the sections called *About Farming* and *About Food for Animals* and follow the same procedure for each of these sections. Answers should be written for the following questions: page 237: 2; page 238: 3, 4, 5, 1, 2, 3, 4.

### HOW WE GET OUR CLOTHING, pages 228-231

#### Readiness vocabulary

woolen	seed pods	linen	spun	luster
cotton	dyed	flax	silkworm	leather
fibers	printed	silk	rayon	garments

#### Relating the story to the child's experience

*Can you name the kinds of materials from which your clothing is made? Where do you think these different materials come from? Can you name some of the plants and animals which furnish our clothing?* Ask the children if they think the following statement is true: "Almost everything we wear comes from plants and animals." Call on a few pupils to give their opinions and the reasons for them.

#### Purpose for silent reading, pages 228-231

Tell the children that as they read the story they may be surprised to learn that one kind of cloth is made from wood and that another kind comes from a worm. Ask them to read to find out about this and to see what else they can discover about how we get our clothing.

#### Enriching concepts through discussion

Call on various pupils to contribute the information needed to make the class list of kinds of cloth and the threads from which they are made (Exercise 1, page 239). As each kind of cloth is listed on the board, let the children tell what they know about it. To enrich the concepts as they are presented, use the following suggestions:

##### A. Wool

Recall the sheep herding stories and have the pupils reread the two paragraphs on page 19 concerning fleece and wool. Look at

the illustration on the same page. Recall the activity in which the children separated bits of wool into fibers.

**B. Cotton**

If possible, show a sample of a cotton boll and let the pupils feel the seeds. Have them examine a piece of cotton cloth and compare it with a piece of woolen cloth.

**C. Linen**

If possible, show a picture of a flax plant. Tell the children a few facts concerning its growth, such as the fact that it has blue flowers and likes to have its feet in water. Refer to table linens and ask children to bring in samples of old pieces of linen if they can.

**D. Silk**

Show a picture of a silkworm and tell how it spins its cocoon. Recall cocoons the children may have seen made by caterpillars and explain the difference. Let them examine a sample of pure silk and compare it with the kinds of cloth previously discussed.

**E. Rayon**

Recall the logging story which told about small trees being ground into pulp. If the pupils are bright, tell them something about the process of making rayon and how it differs from paper-making.

**F. Leather**

Refer to the illustrations of the farm animals on pages 80, 91, 93. Direct the attention of the children to the illustration on page 231.

**G. Making garments**

Refer to the illustration on page 219 and ask these questions:

1. What is this lady doing? What is she making?
2. Are the sewing machines in our houses like this one or different from it? How do you think this machine is run?
3. Where do you think this woman is? Is she the only woman working here?

**Extending geographic ideas learned**

1. Refer the children to the set of questions about clothing on page 239. Ask them to write the answers to the questions and to make

their individual lists in preparation for the class list as suggested in questions 1 and 6.

2. Make two charts using samples of various kinds of cloth. Put the ones which come from animals on one chart, those that come from plants on the other chart.

## HOW WE BUILD OUR HOUSES, pages 232-235

### Readiness vocabulary

frame	bricklayers	fuel	mines
clay	mortar	coal	natural gas
kilns	lime	miners	

### Relating the story to the child's experience

Depending on where the children live, ask them to describe a bad storm they have seen, or to tell what it is like to be outdoors when the weather is very, very hot or very, very cold. Have them tell about specific experiences and then ask them to name a good place to be at these times. Develop their appreciation of the homes in which they live by referring to the protection a house provides and its various means of comfort. Then ask the pupils whether they think they could name materials from which their own homes are built. Let a few pupils try to name these materials. Then direct the class to the illustration on page 233.

### Learning geography from pictures

Picture, page 233. *Would you like to live in this kind of house?* Point out that homes can be attractive as well as useful.

1. Out of what materials do you think this house is built?
2. How many things in the picture show that the weather gets warm where this house is built?
3. Could this house be warm in winter? Why?

### Purpose for silent reading, pages 232-235

Write the words *kiln*, *mortar*, and *fuel* on the board. Pronounce them and ask the children whether they think they know what these words mean. Let them give a few ideas and then ask them to read the story to see whether their answers are right and to learn what these things have to do with "How We Build Our Houses."

**Enriching concepts through discussion**

As each type of shelter is discussed, encourage the children to recall as much pertinent information as they can remember. Refer also to illustrations previously studied. The logging stories, especially, provide valuable information.

The following questions may serve as a guide in the discussion:

1. What do each of these words mean: kiln, mortar, fuel?
2. Name the kinds of buildings used for shelter which are mentioned in the story.
3. What three materials are most often used for buildings?
4. Which kind of building is the strongest?
5. What is a frame house? Why is a frame house easier to build than a log house?
6. How are bricks made?
7. What kind of work does a bricklayer do?
8. Where does coal come from?
9. What are the two kinds of gas? How does the gas heat our homes?

**Independent activities**

The suggestions on page 240 are especially designed for independent work. They include construction activities (Exercise 1), written work (2, 3, 6, 8, 10), observations (4, 7) and classification of pictures (5).

**Excursions for children**

Perhaps the children live where they can take some of these suggested excursions:

**A. Food**

1. Visit a farm or an orchard to see what food crops are grown and what kinds of animals are raised for meat, eggs, or milk.
2. Visit a cannery to see fruit, vegetables, fish, or meat prepared, canned, labeled, and shipped.
3. Visit a terminal market, a farmer's market, or a large food store.

**B. Clothing**

1. Visit a farm where cotton is grown to see it planted, cultivated, or gathered.
2. Visit a pasture where sheep graze or a ranch where the clipping of the wool may be seen.



3. Visit a factory where cloth or clothing is made to see what makes the machinery go, the materials out of which the finished articles are made, the workers, and the packing and shipping of the finished articles.
4. Visit a clothing store to see the kinds of goods sold.
5. Visit a museum which exhibits the steps in the process of making cloth, from raw material to finished product.

#### C. Shelter

1. Visit a large public building and find out what it is used for.
2. Visit a farm to see the farmhouse and the buildings used to shelter the animals.
3. Take a walk down a street or road where different kinds of houses or stores may be seen.
4. Visit the site of construction of a new house at various times in the process of building.

#### SUGGESTED TESTS for pages 221-240

##### Test on geographic ideas

Place the following list of words on the board. Read the statements and have the children select and write the correct word for each blank.

mortar	clay	fuel	linen	stone	wood	skins	wool
silk	rayon	cotton	cheese	water	land	plants	animals
ocean	farming	fish	shelter	milk	butter	earth	chickens
food	clothing	brick					

1. The three necessities of life, other than water, are (*food, clothing, shelter*).
2. The three necessities of life come from the (*earth*).
3. The most necessary food in the world is (*milk*).
4. Poultry farms raise (*chickens*).
5. Dairy farms produce (*milk, cheese, butter*).
6. A food we get from the waters of the world is (*fish*).
7. The work of preparing the soil and raising plants and animals for food and clothing is called (*farming*).
8. The water we drink comes from the (*ocean*).
9. Most of our clothing comes from either (*plants*) or (*animals*).
10. Three kinds of thread which come from plants are: (*linen, rayon, cotton*).

11. Two kinds of thread which come from animals are (*silk, wool*).
12. The leather in our shoes is made from the (*skins*) of animals.
13. The houses we live in are called (*shelter*).
14. The three materials most often used for building houses are (*stone, wood, brick*).
15. Coal and natural gas are called (*fuel*).
16. Bricks are made from (*clay*).
17. Bricks are held together with (*mortar*).

Most of the answers in the next part of the test can be spelled correctly by the children.

18. A necessity is something we (can, *cannot*) do without.
19. We eat mostly (*tame, wild*) plants and animals.
20. (*Field, sweet*) corn is fed to animals.
21. Silage is fed to animals in (summer, *winter*).
22. Trees give us (*some, none*) of our food.
23. Most of the cattle of our country are raised where (*corn, fruit*) is grown.
24. Shelter is most necessary in (summer, *winter*).

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Whipple, Gertrude, 1895-

Basal geographies, by Gertrude

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